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THE

OPHTHALMOSCOPE

A MONTHLY REVIEW OF CURRENT OPHTHALMOLOGY.

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Biological
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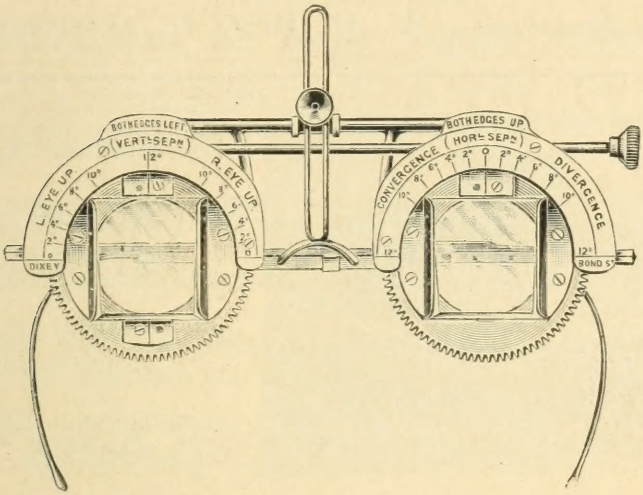

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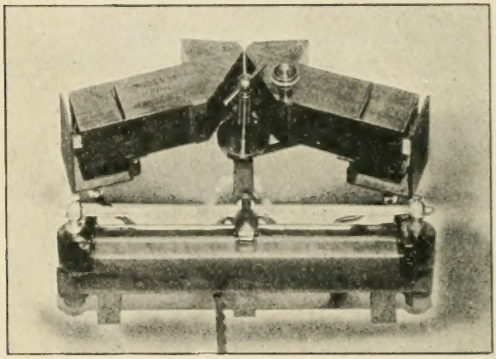

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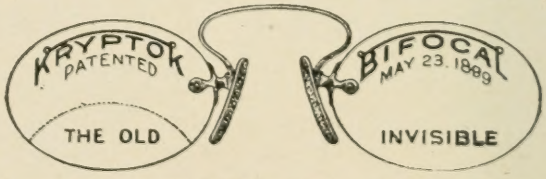

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ORIGINAL COMMUNICATIONS.

ON THE PRODUCTION OF A FILTERING CICATRIX IN CHRONIC GLAUCOMA.*

BY

DR. FÉLIX LAGRANGE,

PROFESSEUR AGRÉGÉ À LA FACULTÉ DE MÉDECINE DE BORDEAUX, FRANCE.

It is scarcely necessary here to discuss and to establish the utility of the filtering cicatrix in the cure of chronic glaucoma. After the work that has been done on the subject, in England

*Communication made to the Oxford Ophthalmological Congress, July, 1907.

notably by Critchett and Priestley Smith, and in France by de Wecker, the necessity of providing free exit for the intra-ocular fluids can hardly be disputed.

In recent communications in the *Archives d'ophtalmologie* * (August, 1906) and in the *Annales d'oculistique* (February, 1907) I have tried to place in order of merit the various methods of treatment employed in glaucoma. There is no present need to re-open this discussion, as the result of which I concluded that, in order to arrest and cure glaucoma, it was vital to free the excretory paths.

It is in vain that one endeavours to obtain a filtering cicatrix by means of iridectomy and sclerotomy. On the one hand, when

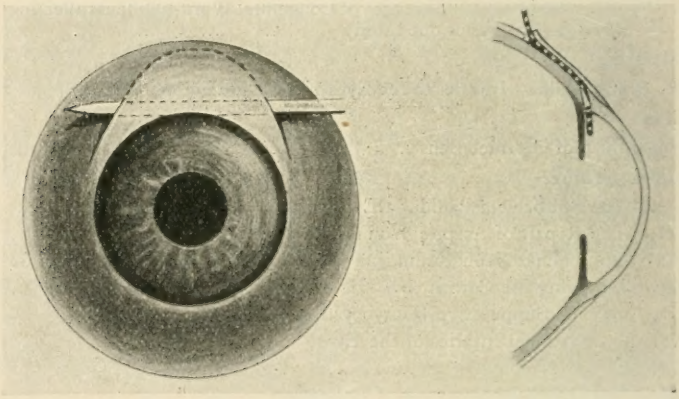

Fig. 1.—Section of the Sclera and Conjunctiva.

the operation is performed correctly, filtration does not take place, while, on the other, it occurs only when the surgeon, despite himself, has allowed the iris to become entangled in the wound. The fragment of prolapsed iris makes the wound gape, prevents adhesion of the lips of the incision, and thus gives rise to a cicatrix capable of allowing the intra-ocular fluids to escape from the eyeball.

A cicatrix obtained in this way presents many drawbacks. It has, however, an undoubted action upon the tension of the globe, and I have often seen patients suffering from glaucoma benefit from the accidental and involuntary entanglement of the iris resulting from iridectomy. Indeed, certain of our English *confrères*, as H. Herbert,† have not hesitated to endeavour to obtain systematically a filtering cicatrix by operation.

In my opinion, this accidental entanglement of the iris presents

*For abstract, see THE OPHTHALMOSCOPE, 1906, p. 574.

† For Herbert's original communication, see THE OPHTHALMOSCOPE, June, 1907.

inconveniences, and that is the reason why I have endeavoured to obtain a filtering cicatrix without including the iris in the lips of the wound. This I have succeeded in doing by an operation that may be called "combined iridectomy and sclerectomy" (*Iridectomie et Sclérectomie combinées*).

Before operation, besides the ordinary antiseptic and aseptic precautions, a few drops of eserine are instilled into the eye. The pupil must be contracted for two reasons: first, because contraction renders the filtration angle freer, and this facilitates the exact passage of the knife; and, secondly, because contraction of the sphincter keeps the iris in the anterior chamber and thus away from the wound. The eserine should be applied

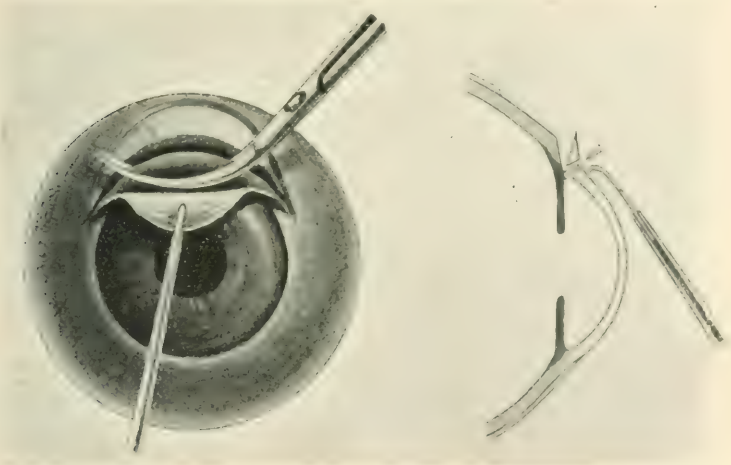

Fig. 2.—Resection of the Sclerotic.

to the eye about half an hour before operation. Shortly before operation, cocaine and adrenaline should be dropped into the eye several times with the object of producing complete insensibility of the iris and obvious anæmia of the mucous membrane. The instruments include those ordinarily employed for iridectomy, with the addition of a small pair of curved scissors,* which should be in excellent cutting order.

In order to conform with classical usage, the operation may be described in three steps:—

First stage.—The sclera is punctured at a distance of 1mm. from the limbus, and the counter-puncture is made at a corresponding point. The sclera is divided in the irido-corneal angle. In terminating the incision, the cutting edge of the blade is directed backwards in such a way as to bevel the sclera, like the

* Made by Luer, of Paris.

mouthpiece of a flute. When the knife is beneath the conjunctiva, a large conjunctival flap is made, such as was practised by von Graefe in his linear extraction of cataract (Fig. 1).

Second stage.—The conjunctival flap is raised by means of fine-toothed forceps, and without interfering with the mucous flap, a sufficiently large piece of the sclera is resected from the exterior lip of the incision (Fig. 2). For this latter purpose the scissors must be extremely sharp, inasmuch as the sclera is a resistent structure. The conjunctival flap, as already stated, is not cut in any way.

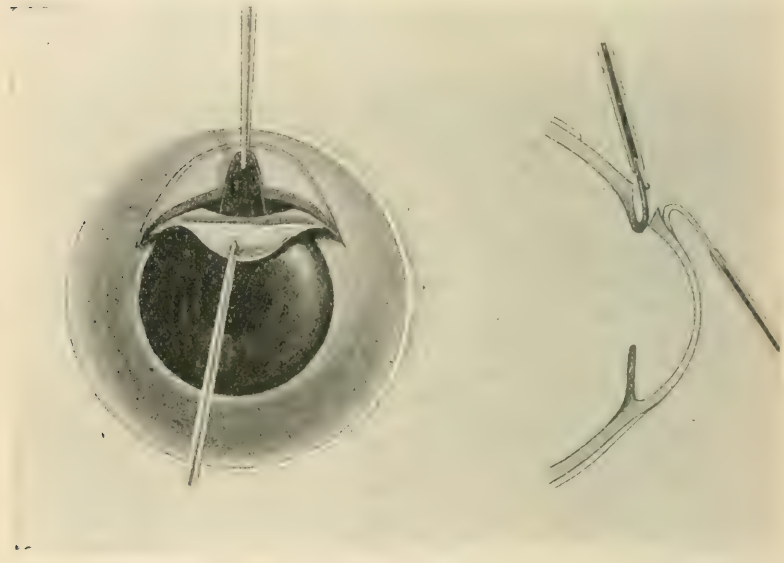

Fig. 3.—The making of the Iridectomy.

Third stage.—Iridectomy is now performed in the usual way (Fig. 3). Finally, the flap of conjunctiva detached in the first stage of the operation is used to cover the wound (Fig. 4).

The illustrations which accompany this communication will render it simple to follow the several steps of my operation. The first three represent the stages of the operation, while the fourth shows the appearance of the eye when the operation is finished.

The results that have been obtained may be discussed under two heads: (1) the formation of the cicatrix, and (2) the clinical results.

(1) **The formation of the cicatrix.**—As regards the filtering cicatrix, I have the honour of presenting to the Congress twelve diagrams which represent faithfully the various kinds of cicatrices

that result from my operation. The variations depend upon the condition of the eye, and notably upon its degree of hypertension. When the intraocular pressure is moderate, the cicatrix is scarcely raised, and it then appears as a small dark line corresponding to the loss of sclera. When tension is considerable, liquid in passing into the subconjunctival space elevates the mucous membrane, which becomes prominent, tomentous, and ampulliform, and sometimes recalls the button of œdema obtained by histologists by injecting liquid into the cellular tissue.

Moreover, in the same patient the appearance of the cicatrix varies, according to the moment when it is examined. Thus, when the glaucomatous eye is not the seat of recurrent hyperdistension, the cicatrix remains flat, although it is always visible

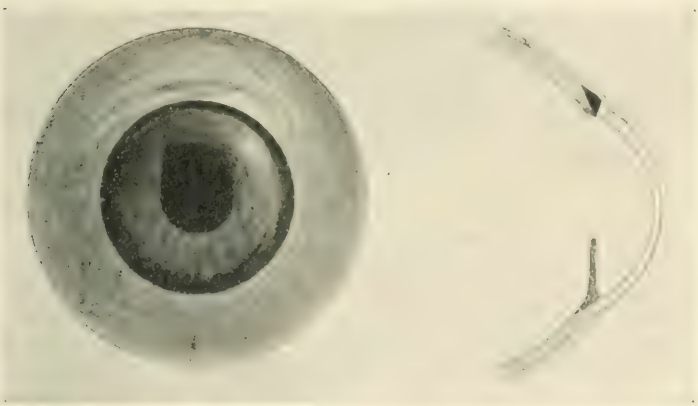

Fig. 4.—The result of the operation.

as a brownish line. On the contrary, if the tension be raised at the moment of examination, the mucous membrane at the level of the cicatrix is raised, and the appearance of a cystoid cicatrix results. One point is clear from the drawings I show, namely, that in no single instance is there any entanglement of the iris.

(2) **The clinical results.**—As regards the results of my operation, I have already published three communications which contain twenty-seven cases watched for periods of longer than six months. Of these cases, four were not followed and three remained without result, because I failed to obtain a filtering cicatrix, owing to timidity in excising too small a piece of sclera. There remain, however, twenty good results among a total of twenty-seven operated on. As to these twenty cases—in twelve the vision was considerably improved, and in eight it was maintained. These modest figures represent only the beginning of a more important body of statistics. At the same

time, these results in chronic glaucoma are of a nature to encourage us in the belief that we can obtain, without entanglement of the iris, and, for that matter, any inconvenience, the filtering cicatrix which has been desired for so long a time.

The results I have obtained since my first publication (*Société française d'ophtalmologie*, May, 1907) merely confirm those given above, and I am able to add to the twenty-seven observations six others, already watched for some time, in which tension has fallen to normal as the consequence of the intervention.

SYDNEY STEPHENSON.

FOUR YEARS' WORK WITH THE OPHTHALMIC HOSPITALS IN EGYPT.*

BY

ARTHUR FERGUSON MACCALLAN, M.B., B.C. (Camb.), F.R.C.S. (Eng.)

CHIEF INSPECTOR OF OPHTHALMIC HOSPITALS IN EGYPT.

An account of the origin and present organisation of the Ophthalmic Hospitals in Egypt.

Foundation.—In the beginning of the year 1903 the Right Honourable Sir Ernest Cassel, G.C.M.G., gave a sum of £41,000 for the ophthalmic relief of the necessitous inhabitants of Egypt. A trust fund was established with this money, and the Right Honourable the Earl of Cromer, O.M., G.C.B., G.C.M.G., His Britannic Majesty's representative at Cairo, was nominated sole trustee by the founder.

Scheme Adopted.—The Director-General of the Department of Public Health was requested to consider the means whereby the object of the founder could best be carried out. He recommended the establishment of a travelling ophthalmic hospital on the lines of the so-called "ophthalmic flying columns" existing at the time in Russia. This scheme having been approved, I was appointed Ophthalmic Surgeon and Inspector of the proposed hospital, and arrived in Egypt on 1st July, 1903. My duties were to organise and to administer a travelling ophthalmic hospital, and to train in ophthalmic surgery Egyptian doctors attached to it.

*Read at Annual Meeting of the British Medical Association, Ophthalmological Section, August 2nd, 1907.

Preliminary Work in Egypt.—Shortly after my arrival in Egypt, I made a tour in the Egyptian Delta, staying at some of the more important towns, at each of which my coming was announced by the local authorities, and poor people in need of ophthalmic treatment were invited to attend at the Government general hospitals for treatment by me and by my Egyptian assistant, who had previously been ophthalmic house-surgeon at the Cairo Government Hospital. During this tour a large number of patients were seen, and many operations performed.

The short time spent at each place makes it obvious that the treatment I was able to give was, for many of the patients, very inadequate. Nevertheless, the tour was very useful to me, for during it I familiarised myself with the conditions under which work would have to be carried on, and I obtained confidence in the possibility of rendering the travelling hospital scheme a success.

Description of an Ophthalmic Camp.—The first encampment, consisting of 10 or 12 large Indian tents, was pitched in the neighbourhood of a populous town of the Egyptian Delta, called Menuf, in the beginning of January, 1904.

My staff consisted of my Egyptian assistant, and clerks, hospital attendants, servants, watchmen, etc. The routine at the first camp was practically the same as that which has obtained at all succeeding camps, except that I have now more assistants.

Clinical work commences daily at 8.30 a.m. by a visit to the in-patients' tents and is followed by two hours operating.

The operations having been finished, the dressing of out-patient cases is proceeded with, and then the new cases are seen. Frequently there are at the present time as many as 200 new cases to be seen, and from whom the most urgent cases and those which will best repay treatment have to be chosen. As about one-third of all cases require operation, and as about 90 per cent. have trachoma, the treatment of all would-be out-patients is impossible.

When the old cases, between 200 and 300 in number, have been treated, minor operations are performed in the theatre, such as scraping the lids for trachoma, etc., and the morning work ends at 1.30 or 2 p.m.

In the afternoon more detailed examination of interesting cases is made, office work is done, and the tents are prepared for the next day's work.

Each Thursday is reserved for refractions, so on this day no operations are performed and no new patients seen. Refraction cases are likely to increase very greatly in the future.

Friday, being the weekly Government holiday, is a *dies non* except in so far as the dressing of in-patients is concerned.

Every patient treated at the hospital receives a numbered card and a leaden disc stamped with a number corresponding to the number on the card. Full clinical notes are written on each patient's card, which is kept at the hospital. At each visit the patient presents his number to the hospital clerk and receives his card, from which the surgeons at once learn the clinical condition and the progress of the patient. A record of every case treated is thus kept.

Each camping ground is occupied for a period of about six months, at the end of which time work is transferred to some other place. This is not because, even after prolonged stay in a place, there is any diminution in the number of people applying for treatment, but because we consider it only just, to give different provinces the benefit of ophthalmic treatment by the travelling hospital. There is ample work for a permanent hospital in every large provincial town, and, as I shall show, the provision of permanent hospitals has already been undertaken by the Egyptian Government.

During the hotter summer months tent work is discontinued and clinical work is carried on in various towns where there happen to be empty barracks, or other rough accommodation, which can be utilised.

There was some doubt at the inception of the scheme as to its probable success, and as to the readiness of the fellahin to take advantage of it. All doubt was, however, soon set at rest by its immediate and complete success. There never was the smallest hesitation on the part of the people to visit the hospital for treatment, nor to submit themselves to whatever operation was advised. All patients are treated free of charge, and are given lotions, etc., for use at home. By far the larger number of the patients have every appearance of poverty.

As an instance of the amount of work done, I may say that on June 12th, 1907, at Damanhour, the number of new patients treated was 45, the number of old patients was 412, and the number of incurable cases was 18. 65 patients on this day applying for treatment, were deferred, owing to lack of time to treat them efficiently.

Future Development of Ophthalmic Hospitals.

After the success of the first travelling hospital had been demonstrated, the establishment of a second hospital was rendered possible by the further liberality of Sir Ernest Cassel.

During the last three years, therefore, I have had two travelling hospitals working, one of which has been in Upper Egypt and the other in Lower Egypt.

The places that have been visited up to the present time are Menuf, Galioub, Zagazig, Damietta, Damanhour, Beni-Suef, Fayoum, and Assiout.

As the result of representations which I made, after two years' work in Egypt, to the Egyptian Government, through the Director-General of the Department of Public Health, the Government adopted the policy of building ophthalmic hospitals, one or more yearly as their finances permitted, and gave me official rank for the purpose of controlling them, under the *ægis* of the Director-General of the Department of Public Health.

There were several weighty reasons why it was considered better to institute special hospitals than to create ophthalmic departments in connection with the existing Government hospitals. First, there was no available accommodation in the existing hospitals; secondly, in the neighbourhood of most of the existing hospitals there was no land available for building purposes; and, thirdly, even if there had been accommodation provided, the large number of patients attending the ophthalmic section daily, often 500 in number, would have entirely disorganised the arrangements of the general hospitals.

During the present year one permanent hospital will be opened at Tanta, and a second one is in course of construction at Assiout.

One of the travelling hospitals was at Assiout from October, 1906, until the end of April, 1907, and the inhabitants of the town and surrounding districts, seeing the immense amount of work that was done and the amount of suffering that was relieved, subscribed a sum of £5,000 towards the expense of building an ophthalmic hospital in their city, which will be maintained and controlled by us.

In the course of 8 or 14 years I shall hope to have a special ophthalmic hospital in the capital town of each of the 14 provinces of Egypt.

My staff at the present time consists of two English ophthalmic surgeons, four Egyptian surgeons, and a large clerical and hospital staff.

English Surgeons.—The number of English surgeons will not be increased. Extra Egyptian surgeons will be provided as the grants from the Ministry of Finance for each additional hospital are made and as they become sufficiently trained in the special work.

The duties of the English surgeons are to give instruction to the Egyptians, and to be responsible for the clinical work of the camp they are in charge of. They have little or no administrative work. The posts are very valuable from the point of view of operative experience, as there is endless material always at hand.

The posts are held for two years, during which three months leave is granted on full pay. The pay is £E500 a year, with the addition of two months' pay in lieu of travelling expenses to and from England. All travelling expenses incurred while on duty are defrayed by the Government. One of these posts will be vacant every October.

Egyptian Surgeons.—My Egyptian assistants are paid at the rate of £E220 a year on joining the hospitals immediately after becoming qualified at the medical school. They have usually at first no more ophthalmic knowledge than is picked up by the average medical student during his hospital career.

Their interest in their work, which is often extremely onerous, their energy and their progress are gratifying, and promise well for the future development of the scheme.

They are not allowed to do private practice during two years of novitiate. At the end of this time they will be appointed to the charge of permanent hospitals as these hospitals are completed.

A nucleus of Egyptian ophthalmic surgeons has thus been collected, and I have striven to instil into them some of these traditions and axioms of ophthalmic surgery which I learnt during my three years' tenure of the post of house-surgeon at Moorfields.

The opportunities that the Egyptian ophthalmic hospitals afford of acquiring experience of every kind, but especially operative experience, are, I believe, unrivalled. I hope that in the future full advantage will be taken of these opportunities by Egyptians, and perhaps also by Englishmen.

Clinical Work done during the Year 1906.

In all, 40,103 patients were examined at the hospitals, and of these 7,327 were admitted for treatment, either as in-patients or as out-patients.

The number of operations performed was 5,846 including minor operations (such as scraping the lids for trachoma) performed on 2,649 patients.

The number of patients with entropion or trichiasis seen during the year was 2,612, or 8 per cent. of all the cases seen; the number of cases seen in which operations for trichiasis had already been performed, generally by charlatans, and in which the condition had either not been cured or had recurred, was 1,693, or 4·25 per cent. of all the cases seen.

There is a great deal of glaucoma simplex in Egypt, but it is nearly always too late to operate when the patients present themselves for treatment.

The number of cases of absolute glaucoma in one or both eyes was 701, or 17 per cent. of all the cases seen.

The number of patients blind in one or both eyes was 1,960, or 4·9 per cent. of all the people who applied for treatment.

During the year 1906, 657 cases of cataract were seen. Of the 487 cases of senile cataract, 102 were operated upon, and of the 170 cases of soft cataract, 123 were operated on. In a large number of cases there was too severe a condition of trachoma to permit of operation being performed without a long period of treatment as a preliminary, and in many cases the cornea was greatly damaged.

Only one albino was seen, but no family history of any value could be elicited from him or his relations. I have noticed more albinos casually in the streets since I have been in Egypt than I ever did in England, probably because in a country where most people are dark, one is especially struck by particularly fair persons.

Operations for Entropion.—The operation for entropion, or trichiasis, which is usually performed, is my modification of Snellen's operation. About 2,000 of these operations were performed during 1906. As of course, is well known, Snellen's operation is merely a modification of Streatfeild's original entropion operation described by him in 1858 in the *Royal London Ophthalmic Hospital Reports.* An incision is made through the skin of the lid 2 or 3 millimetres from its free border. The muscle is dissected from the tarsus and a horizontal wedge-shaped strip is removed from the tarsus immediately above the roots of the lashes. A needle carrying fine silkworm gut is passed through the lower edge of the skin wound vertically upwards, a bite of cartilage above the groove is taken horizontally and the needle is passed from behind forward through the lower skin flap again. Four such sutures are inserted and then tied. A metal spatula (an improvement on the old shoe-horn) made for me by Weiss, is used instead of a clamp. No sutures to approximate the skin edges are usually necessary, though they may be employed. The eyelashes, *except those which are displaced inwards*, are cut previous to the operation.

The advantages of this operation are many. It is applicable to a very large majority of the cases of entropion met with in Egypt. Being easily performed, it can readily be learnt by inexperienced surgeons. It can be rapidly performed; in fact, both upper lids can easily be operated on in 15 minutes by a moderately competent surgeon. A great effect can be produced in the way of eversion of the lid. The operation is applicable to both upper and lower lids. In a very few cases some lashes are still found to be inverted after the above procedure has been carried out; in these cases an incision through the mucous membrane along the free border

of the eyelid immediately posterior to the lashes, as recommended by Agnostakis in 1857, completes the eversion.

There are, of course, a large number of modifications of these operations which we occasionally practise. Van Millingen's graft of mucous membrane from the lower lip is also frequently done, especially in cases where there is much contraction of the eyelid as the result either of disease or of an ill-planned operation.

Contraction of the upper lid as the result of operations by charlatans for the relief of entropion is very often seen. This operation is called the "reed" operation, and consists in the inclusion of a fold of skin of the upper lid between two pieces of reed the ends of which are tied tightly together: the result is that the fold of skin, having its blood supply cut off, necroses, and falls off with the reeds, leaving a raw surface which soon granulates and becomes covered with epithelium. The primary result of the inclusion of the fold of skin is the eversion of the eyelashes —a result which it is desired to produce; the secondary result is shortening of the upper lid, often to such an extent that permanent lagophthalmos results, with consequent degenerative effects on the cornea.

Most of the lid operations in adults are done under the influence of adrenalin and cocain injected hypodermically.

All operations on the lids are performed on out-patients, who go away after the operation and return to be dressed after three or four days.

As regards the treatment of trachoma, I have nothing new to chronicle; we carry out surgical procedure of some kind or other on about three-quarters of the cases of trachoma that we treat, such as scraping, scarification, squeezing, or combined excision of tarsus and conjunctiva as performed by Kuhnt.

I have radium at my disposal to the value of £150, but I am unable at the present time to pronounce definitely on its therapeutic value in trachoma.

CONCLUSION.

From what I have said it must be acknowledged that the amount of suffering relieved by the ophthalmic hospitals has been very great, and will be increased with the establishment of every new hospital. The principles of cleanliness, a much neglected virtue among the fellahin, are taught by the practical method of excluding patients with dirty faces.

The prevention of trachoma seems an almost hopeless task considering that there are at least six million people infected with the disease at the present time, and I should think that this estimate is a low one. It is, however, a guess rather than an estimate.

Comprehension of ophthalmic hygiene is quite beyond the

powers of the uneducated Egyptian, but not beyond the powers of the boys now being educated in the Government schools. It is in the Government schools that we must teach ophthalmic hygiene by the practical means of the treatment of the eyes of trachomatous pupils.

That treatment is urgently required is obvious from the report of the Chief Medical Officer of the schools for the year 1901, who stated that 51 per cent. of the pupils in the Government schools in Cairo showed evidence of trachoma.

In October, 1904, I made an examination of 159 boys in the Government school at Damietta and found that 56·9 per cent. showed evidence of trachoma: 9·7 per cent. had eye affection other than trachoma: 25·5 per cent. had gross corneal change sufficient to cause deterioration of vision.

For the purpose of taking a first step towards dealing with ophthalmic disease in schools, an arrangement has been made between the Ministry of Public Instruction and the Department of Public Health, whereby the staff of the ophthalmic hospitals shall undertake regular daily inspection and treatment in October, 1907, at Tanta Government School. It is at Tanta that the first permanent ophthalmic hospital will be opened this year; hence the possibility of undertaking systematic inspection there.

I hope to be able to show sufficient evidence of the good effects of the ophthalmic inspection and treatment in a considerably shorter time than the five years during which it has been agreed on between the Ministry of Public Instruction and the Department of Public Health that the treatment shall last. It is my hope that in the future it will be possible to provide for the efficient inspection and treatment of all the Government schools in Egypt.

I have only to add that Sir Eldon Gorst, K.C.B., has become the trustee of the Cassel Fund on his appointment to succeed Lord Cromer as the British Agent in Egypt.

The following statistics present some idea of the scope of the work undertaken during the year 1906 :—

	(*) Applying for treatment.	Patients treated.
Beni-Souef	13,548	3,221
Zagazig	14,357	1,223
Damietta	3,101	1,032
Benha	1,575	642
Assiout	7,522	1,209
Total ...	40,103	7,327

Percentage: 18·2 per cent.

*Every patient applying for treatment was examined by one of the ophthalmic surgeons.

At these various places, the hospitals were opened as follows :—

Upper Egypt :—

Beni Souef, January 1st to August 31st	...	8 months.
Assiout, October 6th to December 31st	...	3 months.

Lower Egypt :—

Zagazig, January 1st to June 6th	...	5 months.
Damietta, July 7th to September 23rd	...	3 months.
Benha, November 24th to December 31st	...	1 month.
Total	...	20 months.

DURING THE YEAR 1906.

	Zagazig.	Damietta.	Benha.	B. Souef.	Assiout.	Total
No. of patients seen	1,223	1,032	642	3,221	1,209	7,327
No. of visits made for treatment	20,817	13,864	4,053	37,141	18,279	94,204
Males	592	544	270	1,447	787	3,640
Females	631	488	372	1,774	422	3,687
Age :						
Under one year	211	50	65	82	58	466
1 to 20 years	458	492	246	1,453	547	3,187
21 to 40 years	358	350	290	1,138	407	2,543
Over 40 years	196	140	41	548	197	1,122
Patients from town in which hospital situated	40	629	310	1,055	542	2,576
Patients from Markaz* in which hospital situated	1,178	395	180	1,967	615	4,335
Patients from other Markazes in which hospital situated	5	8	152	199	52	416
No. of in-patients	45	22	12	92	31	202
Major operations :—						
Intra-ocular ... ... }	1,170	382	159	1,274	212	3,197
Extra-ocular... ... }						
Minor operations (numbers refer to patients)	112	353	261	978	945	2,649

BLINDNESS.

	Total No. of patients examined.	Monocular.		Binocular.		Monocular and Binocular.	
		No. of Cases.	Per cent.	No. of Cases.	Per cent.	No. of Cases.	Per cent.
MacCallan.	40,103	1,297	3·2	663	1·6	1,960	4·9
†Eloui	18,000	279	1·55	645	3·58	925	5·13
‡Osborn	600	—	2	—	6		8

* Markaz means a police district. Each of the fourteen provinces of Egypt contains a varying number of markazes—perhaps five or more.

† Eloui Bey. De la cecité en Egypt. Congrès de Bruxelles, 1902.

‡ *Loc. cit.*

During the Year 1906.

Incurable	3,243
Trichiasis	2,612
Post-operative trichiasis	1,693
Absolute glaucoma:	
Monocular	329
Binocular	327
Blind:	
Monocular	1,297
Binocular	663

(Number of cases examined, 40,103.)

CLINICAL MEMORANDA.

SUBCONJUNCTIVAL LIPOMA.*

(Illustrated by Photographs in Colours.)

BY

ÉTIENNE ROLLET, M.D.,

PROFESSOR OF OPHTHALMOLOGY IN THE UNIVERSITY OF LYONS, FRANCE.

I have the honour to show you two photographs in colour, for which I have to thank the kindness of MM. Lumière, of whose recent discoveries with regard to colour photography you have doubtless heard. The first picture shows in a marvellous way one half the face of my young patient affected with subconjunctival lipoma, and the second the microscopical preparation of the tumour in all its details and its true colours. I need hardly insist upon the interest and importance of reproductions of this kind.

The patient, Célestine P——, 19 years of age, entered my *clinique* on June 22nd, 1907, for a tumour affecting the conjunctiva of the left eye. The affection had commenced a year ago, and had slowly become more marked. When the patient adducted her left eye, one saw, a little behind the tendon of the external rectus muscle, a mass, as big as a hazel-nut, with ill-defined edges, losing itself posteriorly in the external *cul-de-sac*. Its colour may be described as yellowish-red. The tumour moved on the underlying sclera, but was adherent to the conjunctiva. No inflammation, pain, or enlarged glands. The general health was excellent. Molluscum fibrosum of the tragus of the ear, but no other malformations. The diagnosis was made of subconjunctival lipo-dermoid, doubtless congenital, with increase in size at the time of puberty.

*Communication made to the Oxford Ophthalmological Congress, July, 1907.

The patient was anæsthetised, and the tumour incised. It adhered to the conjunctiva much in the same way as a lipoma often adheres to the skin. By careful dissection, the yellow fatty mass, a little fibrous in places, was removed. The wound was sutured with catgut. The episclera was normal, and there was no extension of the tumour towards the orbit. Cure was complete on June 25th.

The tumour was examined microscopically by my *chef de laboratoire*, Dr. Aurand. It was yellow, flabby, and lobulated. It was fixed in formol 10%, and stained with Sudan III and hæmatein. Under the microscope one saw a series of fatty lobules coloured orange-yellow by the Sudan III, and surrounded by a fibrous capsule. The conjunctival epithelium covering the tumour was of the stratified pavement type, resting on a chorion thickened by infiltration with fat cells. Beneath the chorion lay a fibrous layer, coloured violet with the hæmatein, with somewhat hyaline connective fibres carrying a number of somewhat vascular septa between the fatty lobules. No hairs, glands, or closed follicles were found.

The microscopic diagnosis, then, was fibro-lipoma, but the stratified pavement epithelium, the adhesion between the tumour and the conjunctiva, and the abundance of fibrous tissue, made one think of a dermo-lipoma, especially when the clinical aspect of the growth and the age of the patient were also taken into consideration.

SIX CASES OF CONGENITAL WORD-BLINDNESS AFFECTING THREE GENERATIONS OF ONE FAMILY.

BY

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LONDON, ENGLAND.

At the Exeter meeting of the British Medical Association (August, 1907) Dr. James Hinshelwood communicated to the section of ophthalmology interesting details concerning four cases of congenital word-blindness in members of one family. In the discussion that followed the reading of Dr. Hinshelwood's paper, I mentioned an even more striking instance of the heredity of congenital alexia that had fallen under my notice. It may serve a useful purpose if I now give the facts somewhat more fully. They are as follows :—

On March 10th, 1905, a young lady of 14 years was brought

to me on account of the unusual difficulty she experienced in reading. Her education was commenced before she was seven years old, and two years had been consumed in learning to know her letters by sight. When ten years of age, she could manage, but with great difficulty, to read aloud very short words, as "cat," "dog," and so forth. During the last two years considerable improvement had taken place in her powers of reading. Miss W——— had a distinct sense of humour, and was stated to reason better than is customary with girls of her age. She answered questions quickly and with obvious comprehension. Although distinctly intelligent, yet Miss W——— was two years older than any of the other girls in her class, the III in a well-known London High School. She experienced, as usual in these cases, no difficulty with figures, so that arithmetic was accurate, and was, indeed, stated to be her strongest point. She was better at written than at mental arithmetic. She was also good at geometry. Miss W——— copied printed words slowly but with tolerable exactitude. She had passed, with honours, three examinations in drawing. The patient was musical, but I gathered that there had been some difficulty about the notes, which she read but slowly, although she had been taught for six years. Her memory was described as "fair" for anything she was told, but the difficulty was in learning from printed characters.

Physically, Miss W——— was a well-grown and finely developed girl, who had commenced to menstruate at twelve years. Her hearing was good. Relative visual acuity = 6/5 ptly. and No. 1 Jaeger Fields for white normal. Refraction (estimated under atropine) R.V. $= 6/9 \frac{+ 0{\cdot}25 \text{ D.Sph.}}{- 0{\cdot}25 \text{ D.Cyl. } 180^{\circ}} = 6/5$. L.V. = 6/9 + 0·5 D.Sph. = 6/5. Fundi normal.

So far, then, the case did not differ materially from those of congenital word-blindness reported by James Kerr, W. Pringle Morgan, Hinshelwood, Nettleship, C. S. Lechner, W. E. Bruner, Wernicke, C. J. Thomas, J. H. Fisher, Variot and Lecomte, J. H. Claiborne, Jackson, and myself. Enquiry into Miss W——'s family history, however, elicited some interesting and unusual facts. Her maternal grandmother, who had been a quiet, reserved woman, was seldom, if ever, seen to read to herself, although she was fond of having other people read to her, she had learned to read with difficulty. Miss W——'s mother (herself unaffected) was the eldest of eight children, of whom four showed symptoms of congenital word-blindness. The following are brief notes of those affected in this, the second, generation: 1. Barbara, now aged 35 years, did not speak until she had reached the age of three years. Much difficulty was experienced in learning to read, but when

14 years of age, she could read slowly. Seldom reads for pleasure even now. She is very musical. 2. Charles, who died at 32 years, had an even more pronounced difficulty in reading than Barbara. He was an educated and even clever man. 3. A girl, who died at eight years, had difficulty in reading. 4. Bella's condition was stated to have been even worse than that of Charles. To render the history complete, it should be added that Miss W———'s brother, aged 16 years, had never experienced the least difficulty in learning how to read.

Remarks.—We have, then, a condition of congenital alexia affecting three generations of a family, passing from the first to the second generation by an affected female, and from the second to the third generation by a female, herself unaffected. In all, six members were attacked. I have elsewhere (*Reports of the Society for the Study of Disease in Children*, Vol. IV, 1904, p. 166), alluded to the tendency to family transmission shown on occasion by congenital word-blindness, and the point has been specially insisted on by Dr. C. J. Thomas (THE OPHTHALMOSCOPE, August 1, 1905), and somewhat more recently by Mr. J. Herbert Fisher (*Ophthalmic Review*, November, 1905). Thomas wrote: "In this connection it is to be noted that it frequently assumes a family type; there are a number of instances of more than one member of the family being affected, and the mother often volunteers the statement that she herself was unable to learn to read, although she had every opportunity" (*loco citato*, p. 381).

TRANSLATION.

INJURIES TO THE EYES OF THE CHILD DURING LABOUR.

BY

DR. BRUNO WOLFF, of Berlin, Germany.*

(*Translated by* ROSA FORD, M.B.Lond.)

Injuries to the eyes at birth have been recently the subject of many careful investigations, as may be seen from ophthalmological literature.

Bloch[1] found among more than 116,000 patients of the Hirschberg Klinik, who came under treatment in the years 1869-1890, 31 cases of congenital paralysis of the abducens, in

**Beiträge zur Augenheilkunde.* Festschrift Julius Hirschberg. Leipzig, 1905.

[1] Bloch, "Abducenslähmung durch Zangengewalt, nebst einem Anhang über Augenverletzungen aus gleicher Ursache." *Centralbl. f. prakt. Augenheilk.*, 1891.

three of which the condition was shown to have been caused during labour by the forceps. In connection with the publication of these three cases, Bloch became the first author to study closely eye-injuries in general occurring through the act of birth. Later, Schmidt-Rimpler,[1] Truc,[2] Praun,[3] Sidler-Muguenin,[4] and Thomson and Buchanan[5] have given careful consideration to the subject.

In still more recent times, owing to special circumstances, the ophthalmological interest in this kind of injury to the eye has largely increased.

Ophthalmoscopic and microscopic examinations undertaken in a number of new-born infants by Königstein,[6] Schleich,[7] Bjerrum,[8] Naumoff,[9] v. Hippel,[10] Montalcini,[11] Wintersteiner,[12] and Paul,[13] show that retinal hæmorrhages and other changes in the fundus occur with surprising frequency in new-born children.

Based on this result, Naumoff,[14] v. Hippel,[15] Hontalcini,[16] de Wecker,[17] and Thomson and Buchanan[18] have expressed the view that, as a result of these and other small changes in the eyes produced by parturition, and at first frequently remaining unobserved, permanent severe disturbances, *e.g.*, amblyopia,

[1] Schmidt-Rimpler, "Die Erkrankungen des Auges im Zusammenhang mit anderen Krankheiten." In Nothnagel's *Spez. Pathol. und Therap.*, Bd. XXI, S. 526. 1898.

[2] Truc, "Lésions obstétricales de l'œil et ses annexes." *Annales d'oculistique*, T. CXIX, 1898.

[3] Praun, *Die Verletzungen des Auges*, Weisbaden, 1899.

[4] Sidler-Huguenin, "Beitr. z. Kenntnis der Geburtsverletzungen des Auges." *Correspondenzblatt f. Schweizer Aerzte*, 1903.

[5] Thomson and Buchanan. "A clinical and pathological account of some of the injuries of the eye of the child during labour." *Trans. Ophthalmological Society of the United Kingdom.* London, 1903. Vol. XXIII.

[6] Königstein, "Untersuchungen an den Augen neugeborener Kinder." *Wiener med. Jahrb.*, 1881.

[7] Schleich, "Die Augen 150 neugeborener Kinder, ophthalmoscopisch untersucht. Mitteil aus d. ophthalmiatr, Klinik in Tübingen, 1884." Quoted by Naumoff.

[8] Bjerrum, *Internat. Kongress zu Kopenhagen*, 1884. Quoted by Naumoff.

[9] Naumoff, "Ueber einige pathol. Veränderungen im Augenhintergrund bei Neugeborenen." v. Graefe's *Arch. für Ophthalm.*, 1890. Bd. XXXVI.

[10] v. Hippel, "Pathol. Anatom. Befunde am Auge des Neugeborenen." v. Graefe's *Arch. für Ophthalm.*, 1898. Bd. XLV.

[11] Montalcini, "Di una interessante lesione retinica in occhi dei neonati e della sua eziologia studiata spezialmente sotto il punto di vista ostetrica." *Riv. di ost. e gin. e ped.*, 1897. Quoted from Frommel's *Jahresbuch*, 1897.

[12] Wintersteiner, "Beitr. z. Kenntnis d. Geburtsverl. des Auges." *Zeitschrift für Augenheilk.*, 1899.

[13] Paul, "Ueber einige Augenspiegelbefunde bei Neugeborenen." Inaug. Diss. Halle, 1900. Quoted from Frommel's *Jahresbuch*, 1901.

[14] Naumoff, *loc. cit.*

[15] v. Hippel, *loc. cit.*

[16] Montalcini, *loc. cit.*

[17] de Wecker, "Les Lésions oculaires obstétricales." *Annales d'oculistique*, T. CXVI., 1896, p. 40.

[18] Thomson and Buchanan, *loc. cit.*

strabismus, and ptosis, may appear; and, consequently, many so-called "congenital" affections of the eye may be due, not to a faulty construction of the eye, but to the incidents of labour.

While ophthalmologists take a lively interest in eye injuries of the new-born, the subject has been as yet little discussed among accoucheurs, *i.e.*, from a purely obstetrical point of view. In text-books on midwifery, the occurrence of this or that eye injury is indeed shortly noted; particularly in Peter Müller's handbook of midwifery, where Küstner[1] mentions in the course of his work on the *Verletzungen des Kindes bei der Geburt*, also many injuries of the eye; but I have nowhere found any definite collective and close obstetric consideration of the subject.

Correspondingly, the side of the question of special interest to obstetricians is as yet very little elucidated. Cramer, who in his noteworthy researches into the "Silver catarrh of the new-born" points out[2] that the eyes of children are very frequently altered through parturition, rightly says[3] that an adequate explanation of the occurrence of eye diseases in the new-born is still due from accoucheurs.

There are, doubtless, a number of questions associated with the observation of such injuries which deserve a considerable amount of practical obstetric interest. To these belong, in the first place, the question as to the frequency of these injuries in general as well as in individual forms of labour in particular; further, the question through what forces, either in spontaneous labour or in labour with operative interference, such traumas originate, and how they may, as far as possible, be avoided; and, finally, the question, what responsibility attaches to the doctor to whom such an event happens.

The material at present before us referring to this subject is far from adequate to answer all these questions in a completely satisfactory manner, more particularly for this reason, that in the published cases, details as to the course of labour are often very inexact. Still, I think it is now time, on account of the importance of the subject, to sift the existing material, already quite plentiful; to glance at previous results, and so perhaps to elicit other communications, which may further elucidate the question.

I will now proceed, in the first place, to give notes of four cases of eye injuries to the new-born, which I have noted among 581 cases of labour, in which a contracted pelvis existed, treated

[1] Küstner, in Peter Müller's *Handbuch d. Geburtsh.* 1889. Bd. III.

[2] Cramer, "Der Argentumkatarrh des Neugeborenen." *Arch. f. Gynäk.*, 1899. Bd. LIX.

[3] Cramer, "Geburtshilfl. Verletzung des kindlichen Auges." *Centralbl. f. Gynäk.*, 1899.

in the years 1892 to 1902, in the obstetric out-patient department of the *charité*.

Then, I will give, as far as the literature accessible to me permits, as complete a tabular review as possible of the collected cases of eye injuries in the newly-born, with special regard to the details of the course of labour in each individual case.

Finally, from this collective material, I will try to form some conclusions on the questions thus brought forward, which are so important from a practical obstetric point of view.

The four cases of eye injury among the above-mentioned 581 deliveries with a narrow pelvis, were as follows :—

Case I.—W., aged 31. Multip. 3. Generally contracted pelvis. Distance between spines 24, crests 26½, trochanters 29 cms., ext. conjugate 16½, diagonal conjugate, 10 cms.

2nd vertex presentation. 30 hours after rupture of the membranes about one-third of the head had passed through the pelvic brim. Urine contained blood; œdema of the labia. Temp. 36.5°C. Pulse 134. Os size of a small palm of the hand. High axis-traction forceps.

Deeply asphyxiated boy, with exophthalmos; revived, but died on the same day, after onset of bleeding from nose and mouth.

Puerperium : 5th day, temp. 38.8°C. Pulse 120. Otherwise a normal course.

Case II.—K., 30 years. Primipara. Rachitic flat pelvis. Spines 26, crests 27, ext. conj. 18, diag. conj. 9½—9 cms.

On the 15th December the membranes ruptured. Only on December 22nd was medical help called in. 11 a.m., temp. 37.4°C., pulse 120. Fœtal heart sounds not distinguished with certainty from the maternal pulse, probably present. Os, a thick rigid ring, about the size of a finger. 1st vertex presentation. Small segment of the head in the pelvic brim, sagittal suture transverse. Small fontanelle to the left. Marked câput succedaneum. Promontory can still be reached by bending the finger, and on pulling back the head with a straight finger. Stinking, purulent-looking masses come from the vagina.

Incision of os. High forceps, transversely placed. Very difficult extraction.

Perineal incision.

Dead, full term, rather large boy. Perineal suture.

Puerperium : slight rise of temperature at first, later normal.

Autopsy of the child shows : sanguineo-serous caput succedaneum. Blood flows from the left orbit. Left parietal bone markedly flattened and pushed under the right. A fracture extends along almost the whole left half of the frontal bone to the orbit. On opening the skull, numerous blood tracks are seen in the posterior, middle, and left anterior cranial fossæ. Both orbital roofs fractured.

Case III.—T., 20 years. Primip. Generally contracted pelvis. Spines 23½, crests 26, trochanters 30, ext. conj. 17½ cms.

1st vertex position. About 11 hours after rupture of the membranes, os fully dilated. The head in about the widest part of the pelvic cavity. Temp. 38.2°C., pulse 120. A private doctor had already tried forceps in vain. Head now extracted with forceps. Perineal rupture, 1st degree. Suture.

Living child, 53 cms. long. Mark of the forceps on forehead and eye. Facial and brachial plexus paralysis.

Puerperium : on the two first days a rise of temperature to 38.3°C., then a normal course.

[1] In another place I have given full notes of these labours with a narrow pelvis, regarded from an obstetric-therapeutic standpoint (*See* Bruno Wolff, "Beitr. zur Lehre von der Wend. u. Extr. beim engen Becken." *Arch. f. Gyn.*, 1901, Bd. LXII. "Weiterer Beiträge zur Therapie der Geburt beim engen. Becken." *Arch. f. Gyn.* 1902, Bd. LXIX.—"Ueber die prophylaktische Wendung." *Berl. Klinik*, 1904. Oktoberheft.

Case IV.—K[1]. Ricketty flat pelvis. Spines 28, crests 29, ext. conj. 18, diag. conj. about 11 cms. The first three labours said to have been normal.

31 years, Multip. 4. 1st vertex position. 20 hours after rupture of membranes—lower segment of uterus tender on pressure; contraction ring; blood in urine. Patient has had severe pain in the left leg for two days.

Fœtal heart sounds 176. Head in pelvic brim. Promontory reached with bent finger.

High forceps.

Atonic post-partum hæmorrhage. Manual extraction of placenta. Slightly asphyxiated child; revived.

Puerperium: after the confinement the mother developed a neuritis in the left leg and there was parametric resistance on the left side. Fever. Admitted into hospital; there fever rapidly disappeared; gradual recovery.

Examination on May 12th, 1902, showed:—The leg is completely recovered, but the patient still complains of abdominal pain dating from the confinement. Perineum intact. Cervix thick. Uterus ante-flexed, somewhat thick and hard. Resistance in posterior fornix. Scar-like cords in right and left parametria. Pendulous abdomen. Diagnosis: chronic parametritis.

The child became affected, soon after birth, with convulsions. On the third day it was taken into the babies' side of the Charity.

Dr. Finkelstein, who watched the case there, has published a full report of the course of the child's illness in a work entitled "The Diseases of Infants produced by Birth-injuries."[2]

From the description of the case given by Finkelstein, I extract the following:—"On admission, coma, slight paralysis and spastic signs in the extremities, right more than left. Tongue deviated to right side. Left-sided facial paralysis, well-marked impressions of the forceps blades, which have lain in an oblique diameter; the left eyeball is crushed. In front of the left ear extensive effusion, also on the right parietal. No evidence of fissure or green-stick fracture. Frequent peculiar convulsions, beginning with rhythmic suction-like movements of the tongue and upper-jaw, followed by rhythmic twitchings of the extremities, first on the right, and then on both sides, and spasmodic lateral movements of the R. eyeball; at the end of the attack, athetosis-like movements, about one minute long, of the arms. Abdominal reflex absent; marked jaundice; urine contains albumen, blood, biliary pigment. Gradually, all the signs disappeared; the temperature frequently rose to 40°, recovery from the fifth day of life onwards, no convulsions; at three weeks old apparently completely cured, discharged, all paralyses and signs of inflammation having disappeared."

The case was taken to be "a peripheral left-sided facial paralysis combined with meningeal hæmorrhage over the left cerebral hemisphere. Jaundice and fever probably caused by absorption of the extravasation." On the injured eye corneal opacities appear to have persisted. Later inquiries about the child shewed, as F. reports, "that the improvement was deceptive. After discharge, maximal flexor contractions very soon set in, in all four extremities, opisthotonus, and forcible rotation of the head with the chin over the right shoulder. Therewith probably idiocy. Died in three months. No *post-mortem*."

I give now a tabular review of the material which I have found in the literature on birth-injuries to the eye, including the four above-mentioned cases.

In arranging the cases, I have adopted the following classification:—

I.—Labours, in which the head is born last. Turning; primary pelvic presentations.

II.—Labours, with the head presenting.

[1] The case is identical with that published by me in the *Archiv*, p. 6, Synäd Bd. LXIX. S. 261.

[2] Finkelstein, *Berliner Klin.*, Heft 168., Juni 1902, S. 7, 8 and 11.

A.—*Spontaneous Deliveries.*

Usual vertex positions, vertex positions with arm prolapse, frontal presentation, face presentation, brow presentation.

B.—*Forceps Deliveries.*

(a) High forceps.

(b) Forceps, no further details, as to whether the head was in the pelvic brim or lower down.

Vertex presentations, brow presentation, face presentation.

(c) Forceps to the head in the pelvis.

III.—Cases, in which details of the course of labour are not given.

In each of these divisions the cases are, as far as possible, arranged according to the nature of the eye-injuries. I have not considered with these, cases in which the eye-injuries were produced by craniotomy, as part of the effects of perforation or of cephalotripsy.[1]

I.—*Labours with after-coming Head.*

Author.	Reference	Condition of Child.	Details of Labour.
Danyan	"Ueber die Schädelbrüche beim Fötus, welche bisweilen als Folge natürl. Geburten beobachtet werden." *Journ. de Chir.*, par Malgaigne, 1843, *Zit. nach Schmidts Jahrb.*, 1844, Bd. XLII., S. 313.	Extravasation of blood under the scalp. Fracture R. orbital arch. Eyelids swollen, violet.	Turning. Conj. vera only $3\frac{1}{2}$ in. D. holds the origin of the injury to be independent of the process of extraction, since the delivery of the head took place easily and without difficulty.
Dittrich	"Ueber die mit der Geburt in Zusammenh. stehenden Eindrücke und Verletzungen des kindl. Schädels," u.s.w. *Wein. klin. Wochenschr.*, 1892.	Depression of the left frontal bone, below the middle of the left coronal suture, and over the border of the fissure between frontal bone and sphenoid. A penetrating fracture of the bone. Fracture of left orbital roof.	Still-born child. Breech-presentation (according to mother) A doctor was only sent for when the midwife could not deliver the head.
v. Hofmann	"Lehrbuch d. gerichtl. Medizin. 9 Aufl. Bearb. von Kolisko," 1902. S. 830.	Fracture of R. arm. "Fissures of both orbital roofs, suffused with blood."	Pelvic presentation. ("Without forceps.")

[1] Associated cases, in which craniotomy was performed, are reported in the articles about birth injuries of the eye by Thomson and Buchanan (*loc. cit.*), and by Mizuno (*Medizin. Gesellschaft in Tokio*, Sitzung vom 20 Jan., 1904, refer. *Deutsche med. Wochenschr.*, 1904, No. 43).

II.—*Labours with forecoming head.*

A.—Spontaneous Deliveries.

Author.	Reference.	Condition of Child.	Details of Labour.
Hofmann	"Zwei Fälle von Exophthalmos." . . *Monatschr. f. Geburtsh.*, Bd. IV. 1854.	Full-term strong child. The R. eyeball has been gouged out, and lies on the middle of the R. cheek in somewhat loose cell-tissue and hanging by the not quite ruptured rectus inf. muscle.	Second confinement (first child a 7 months child) perfectly spontaneous delivery in the first vertex position. During labour the patient took 5 half-scruple powders of ergot. The third confinement of the same woman, see below under forceps deliveries (of the same author). After a fourth confinement the woman died. The autopsy showed: Trochs. 11 in., crests $10\frac{1}{2}$ in., spines 8 in., conj. 3 in., trans. diam. $4\frac{3}{4}$ in. The promontory projected forward markedly, and had a sharp border. In the whole pelvis, no deformity, no bony prominence, or anything of the kind.
Sidler-Huguenin	"Beitr. zur Kenntn. der Geburtsverl. des Auges." *Correspondenzbl. f. Schweizer Aerzte*, 1903.	Directly after birth complete R. sided facial paralysis noted. Lagophthalmos. After 3 weeks, corneal ulcer as a result of incomplete lid closure.	Primip. Spontaneous, completely normal delivery, normal pelvis. Vertex presentation.
Groeningen	*Charité-Annalen* 1887. *Jahresb. der Geburtsh. Klinik* pro 1885.	Paralysis of the frontal, eye, mouth, and nose branches of the R. facial.	First vertex position. Spontaneous delivery. "No cause can be found for the rare occurrence in spontaneous delivery."
Sidler-Huguenin	*Loc. cit.*	Four cases of congenital ocular paralysis of which 3 were cases of total paralysis of the abducens. In one patient the elevator and depressor of the left eye were paralysed.	In all four cases it was ascertained that the labour was very slow, but no artificial help was given.

AUTHOR.	REFERENCE.	CONDITION OF CHILD.	DETAILS OF LABOUR.
Thomson & Buchanan	"A clinical and pathological account of some of the injuries of the eye of the child during labour." *Trans. of the Ophthalm. Society of the United Kingdom*, Vol. XXIII, 1903.	Diffuse opacity of both corneæ.	Arm prolapsed by the head. No forceps.
Ahlfeld	*Lehrb. der Geburtshilfe*, 1898. S. 461.	Impression on the orbit, with exophthalmos.	Brow low down. Through pressure acting on the temporal part of the orbit, eyeball pushed forward.
Bock	"Luxatio bulbi intra partum." *Centralbl. f. prakt. Augenheilk.*, 1902, Januar.	Superficial excoriation of the skin at the root of the nose. The borders of the R. eyelid are not visible; the R. eyeball lies in front of the palpebral aperture, its conjunctiva is torn in several places and shows blood extravasations. On the sclerotic, stumps of eye muscles. Cornea cloudy. On pushing back the eyeball, purulent inflammation of the eye and *exit.let alis* followed	Bock supposes that a face presentation was taken to be a breech presentation, and in the efforts to extract the child, the finger bored into the orbit, on the assumption that it was the anus.
de Wecker	"Les lésions oculaires obstétricales." *Annales d'oculistique*, Tome CXVI, 1896.	Orbit emptied.	Face presentation. The orbit was taken to be the anus, and the eye was destroyed by the pressing in of the examining finger.
Skrzecka	"Aus der gerichtsärztl. Praxis." *Vierteljahrsschr. f. gerichtl. Medizin*, 1869.	Swelling of the lid.	Difficult labour in brow presentation.

B.—Forceps Deliveries.

(a) High forceps.

Author.	Reference.	Condition of Child.	Details of Labour.
Rédemans	*Annal. d'oculistique*, XXVII, p. 89, quoted by Bloch.	Living child. Two hours after birth R. eye fell out of the orbit, but could still be moved. The lids were drawn back behind the globe, while the conjunctiva, markedly infiltrated with blood, bulged forward. Purulent inflammation of the eyeball ensued. Left, slight infiltration of the lid.	Multip. 6 (5 children still-born). Narrow pelvis. High forceps.

(*To be continued.*)

NOVELTIES.

A NEW FORM OF CATARACT LENS.*

The "Luxe" Featherweight.

The ordinary cataract lens hitherto in general use is not only heavy, but, also, on account of its thickness, very unsightly. A still more serious drawback is that of the strong aberration produced at the periphery of such a deeply-curved lens.

Of the many attempts to avoid these drawbacks, the most successful has been the cemented lenticular, in which a small "wafer" of strong power has been placed in the centre of a piece of flat glass, thus reducing weight, and, incidentally by "stopping down" the aperture, also reducing the aberration. The very serious defect of the cemented piece coming off at the least possible concussion, change of temperature, or rough handling due to the wiping of the glass, has, however, prevented this coming into general use.

In the "Luxe" model submitted to us, the defects of the cemented lens seem to have been completely overcome. The lens is made from one solid piece of glass, a strong curve being ground in the centre of the shallow lens, and is made in all the usual forms, plano-convex, deep periscopic with a base of +6.0D, as well as with cylindrical and toric surfaces, as shown in the accompanying drawings.

*Manufactured by the Uni Bifocal Co., Ltd., 188, Strand, London, W.C.

The lens is extremely light, being less than one-third of an ordinary bi-convex cataract lens; in fact, it is claimed that a plus 18.0 D. lens will float on water before being "shanked down" to the size of the eye.

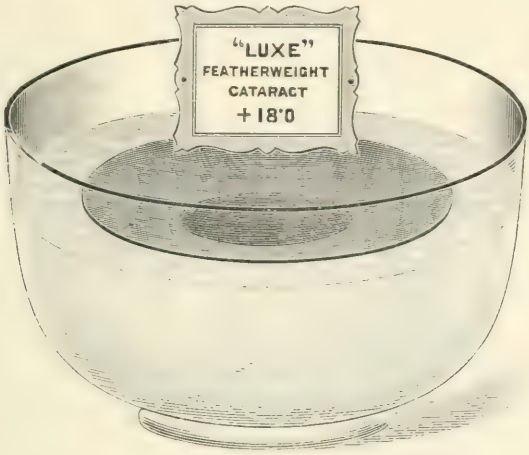

FIG. 1.

We have examined several samples of these lenses and failed to find the least trace of aberration. It is an additional advantage that the dividing line is practically invisible, giving the lens the appearance of an ordinary spectacle lens. It is a pleasure to

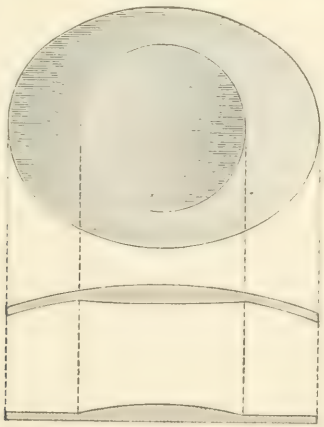

FIG. 2.

know that this high-class grade of optical workmanship is of British invention, and we have no doubt that the lens will recommend itself to surgeons for the use of their better-class patients.

The lens was on exhibition at the recent Heidelberg Congress, and is now available for inspection at Mr. Hawes', 49, New Cavendish Street, W., and 79, Leadenhall Street, E.C.

CURRENT LITERATURE.

NOTE.—Communications of which the titles only are given either contain nothing new or else do not lend themselves to abstract.

I—THE SPIROCHÆTA PALLIDA IN EYE WORK.

(1) **Bab, H.—The presence of spirochætes in the human eye; a contribution to the genesis of eye affections in hereditary syphilis.** *Deutsche med. Wochenschrift*, Nov. 29, 1906, p. 1945: *Annales d'oculistique*, juillet, 1907.

(2) **Schlimpert, H.—The anatomic-pathological findings in two cases of congenital syphilis.** *Deutsche med. Wochenschrift*, Nov. 29, 1906, p. 1942: *Annales d'oculistique*, juillet, 1907.

(3) **Aubineau, E.—Hard chancre of the conjunctiva. (Chancre induré de la conjonctive.)** *Annales d'oculistique*, juillet, 1907.

(4) **Chaillous, J.—Chancres of the inner angle of the eyelids and of the bulbar conjunctiva. (Chancres de l'angle interne des paupières et de la conjonctive bulbaire.)** *Recueil d'ophtalmologie*, juillet, 1907, p. 434.

(1) **Bab's** case, observed at the Berlin Charité, deals with a macerated fœtus of eight months, in which spirochætæ were demonstrated in the liver, spleen, testicles, umbilical cord, etc. The eyes presented no macroscopical changes. The cornea, however, contained in its substantia propria a large number of spirochætes, and the latter were even more abundant in the layers near Descemet's membrane. Most of the organisms were arranged parallel to the direction of the corneal lamellæ. The stroma of the iris included many spirochætes, but the choroid was even more affected. They were not found in the ocular muscles, the ciliary processes, the crystalline lens, or the vitreous body. The tissues which contained the spirochætes showed no signs of inflammation. The walls of the vessels were normal. The reaction of the tissues to the parasites, therefore, does not manifest itself until long after the proliferation of the

spirochætes. Bab briefly narrates a second case, also in a macerated fœtus of 40 centimetres, which presented spirochætes in the choroid and sclerotic. In a third case, that of a macerated fœtus of 38 centimetres, Bab found spirochætes in the optic nerve in the neighbourhood of the central veins and artery and in the connective tissue septa. They were present also in the retinal vessels and their immediate vicinity. The vitreous body and the crystalline lens included no spirochætes. Bab does not believe it necessary to cut up the tissues into tiny pieces for the silver impregnation. Although he fixed the eyes as a whole yet he obtained excellent results. Lastly, Bab found spirochætes in the nasal mucous membrane of macerated fœtuses. Seven figures illustrate an important communication. V. M.

(2) **Schlimpert** has studied the eyes of several syphilitic fœtuses, and twice he has found ocular lesions and spirochætes by the silver impregnation method of staining. *1st case.*—A macerated fœtus of four months affected with specific osteochondritis. Spirochætes in the spleen, kidneys, testicles, hypophysis, and meninges. No macroscopical lesions as regards the eyes. Microscopic examination showed no infiltration of the cornea. The choroid was markedly altered. The vessels were dilated, and there were here and there hæmorrhages and cellular infiltrations. The infiltration was especially pronounced at the level of the chorio-capillaris. The retina, crystalline lens, and vitreous body could not be studied in detail, owing to their bad preservation. A few spirochætes were found in a vessel of the conjunctival cul-de-sac. They were also found in the cornea near the membrane of Descemet. The choroid contained more of them. They were also seen in the interstitial tissue of the lamina vasculosa and in the vessels. Isolated specimens were discovered in the supra-choroid and in the inner granular layer of the retina. The parasites were further present in the pupillary membrane, the ciliary body, the lacrymal glands, the optic nerve, the ocular muscles, and so forth. *2nd case.*—A fœtus of fifty centimetres, dead fourteen days after birth. Congenital syphilis; specific osteochondritis. Pemphigus. Lobular pneumonia. Hypertrophy of the spleen and liver. Spirochætes in large numbers in the viscera. The choroid was thickened, especially towards the posterior pole, in consequence of a dilatation of the vessels and a cellular infiltration. It included many spirochætes. The last-named were found isolated in the stromal spaces of the lamina vasculosa or in the vessels and the vascular endothelium. They were seen but rarely in the retina and between the laminæ of the sclera. They were not present in the optic nerve. On the other hand, they were numerous in the muscles and in the orbital tissues. V. M.

(3) **Aubineau** describes a hard chancre on the lower lid of a married woman, and illustrates his remarks by six coloured pictures, of which four delineate the clinical appearances of the conjunctival lesion, and two the treponema, which was found in the case.

The patient, 22 years of age, was seen on January 29th, 1906, complaining of a sense of uneasiness in her right lower lid and of an enlarged gland in front of the corresponding ear. The symptoms had been present for about three weeks. On exposing the lower lid, Aubineau found a yellowish-white adherent membrane, measuring 10mm. or 11 mm. by 3mm. or 4mm., occupying approximately the central part of the palpebral conjunctiva. Slight muco-purulent secretion. The enlarged preauricular gland had the size of an almond. The examination of smears for bacteria was negative, and nothing grew on serum inoculated from the conjunctival patch. On February 15th the exudation had invaded the cul-de-sac and extended upwards over the ocular conjunctiva, the lower lid had commenced to swell, and the submaxillary glands participated in the process. The preauricular gland, moreover, was larger than it had been. On February 22nd the exudation had lost its pseudo-membranous appearance, and had assumed the aspect of a shallow ulcer, with irregular margin. At this stage the ulcer was scraped, and the material thereby obtained spread upon cover-glasses, which were handed over to Dr. Victor Morax for bacterioscopic examination. The preparations were treated by the Proca-Vasilescu plan, the details of which follow.—The specimen is fixed in alcohol, and then placed for 10 minutes in solution A (Pure carbolic acid, 50 gr. ; tannin, 40 gr. ; water, 100 gr. ; basic fuchsin, 2 gr. 50 dissolved in 100 c.c. of absolute alcohol.) The preparation is then washed in water and dried. It is next treated for from one to five minutes in solution B (saturated alcoholic solution of gentian violet, 10 c.c. ; liquid carbolic acid, 5 cc. ; distilled water, 100 cc.). Finally, it is washed in water, dried, and mounted in Canada balsam. The spirochætæ are stained of an intense violet by this plan, contrasting with the pale violet of the rest of the preparation. Aubineau's specimens, then, were found to contain the spirochæta pallida in tolerable numbers.

The further progress of the case presented nothing specially remarkable. On March 1st a syphilitic roseola made its appearance. On March 10th the cornea, although not ulcerated, became cloudy. The condition resembled one of interstitial keratitis, and may have been such. On March 20th the chancre appeared to have attained its complete development, and on this date spirochætæ were again found. By the end of March the

condition of the eye showed considerable improvement, but the cornea was still dull. Spirochætæ could no longer be demonstrated. In brief, on October 19th, 1906—that is, upwards of nine months after the patient was first seen by Aubineau—the cornea was still cloudy, fingers could be counted at half a metre, and a cicatricial band united the centre of the lower lid with the ocular conjunctiva below the cornea. It should be added, as a point of some little interest, that on August 30th the patient was delivered of a still-born infant.

Commenting on the foregoing case, Aubineau insists, with Morax, that the primordial signs of a chancre of the conjunctiva are two in number, namely, local induration and adenitis. But the former is a late sign, and hence less important for the early diagnosis than the latter. When the lesion assumes an ulcerative character, however, induration becomes the more important diagnostically. In the present case, as the author points out, the discovery of the spirochæta led to recognition of the nature of the conjunctival lesion before the appearance of the secondary symptoms (roseola). The organism was found twenty days after treatment had been instituted, but could not, on the other hand, be demonstrated when the chancre was in process of healing. SYDNEY STEPHENSON.

(4) **Chaillous's** patient and preparations were presented to the Paris Ophthalmological Society on July 2nd, 1907, and the following abstract of the case is taken from the *Recueil d'ophtalmologie* for July, 1907.—A man of twenty years consulted Chaillous a few days ago on account of "watering and of redness of the inner angle of the left eye," conditions that commenced towards the middle of the month of May, without obvious cause. The upper eyelid is somewhat swollen, and droops a little. The inner commissure of the eyelids is filled with a muco-purulent exudation. When this exudation was removed, it was seen that the inner angle and the region of the punctum lacrymale of the lower eyelid were scooped out by an ulcer, of which the edges were clearly defined, and the surface slightly granular, reddish in colour, and bleeding little. On raising the upper eyelid and making the man look down, one saw on the thickened bulbar conjunctiva, a large button of scleritis occupying the region corresponding to the vertical meridian of the cornea. The swelling, which had the size of a small hazel-nut, presented a rounded superficial erosion some 6mm. or 7mm. in diameter. At the level of this erosion one saw a seed-plot of greyish-yellow spots, the size of the head of a pin, recalling the tiny nodules so frequently observed in the course of tuberculosis of mucous membranes. The whole of the bulbar conjunctiva was swollen and of violaceous aspect.

The conjunctival nodule was neither painful nor tender. Although the preauricular gland was scarcely appreciable, yet there were about a dozen enlarged glands in the angulo-maxillary region. One gland was more obvious than the others. The finding of these lesions, and the existence of probable tuberculous antecedents (frequent attacks of bronchitis since the age of ten years, and double chronic otitis) led Chaillous to think that he had to deal with tuberculosis of the angle of the lids and of the conjunctiva. The inoculation of a guinea-pig with a bit of the excised bulbar conjunctiva, however, yielded a negative result, and so did the ophthalmo-reaction of Calmette.* Chaillous then thought of syphilis as the cause of the ulceration. Cover-glasses were smeared with serosity collected from the ulceration at the inner angle, and stained by Giemsa's method. Many spirochætæ were found in the specimens. A diagnosis was accordingly made of chancres of the eyelid and of the bulbar conjunctiva. The co-existence of the two lesions presents, by reason of its rarity, a certain clinical interest. But the author particularly insists upon the fact that the nature of the affection was diagnosed by the discovery of Schaudinn's spirochæta. It may be added that on July 6th the patient presented typical roseola. SYDNEY STEPHENSON.

II.—THE REPAIR OF ASEPTIC WOUNDS OF THE CORNEA.

Germani, Cesare.—On the processes of repair of aseptic wounds of the cornea. (Sul processo di riparazione delle ferite asettiche della cornea.) *Rivista Italiana di Ottalmologia*, Jan.-Feb., 1907.

Germani has examined the course of healing aseptic wounds, both those which involve a part only, and those which involve the whole thickness of the cornea. He comes to the following conclusions :—(1) In deep wounds, the first process observed is the formation of a covering of epithelium, this is due to the indirect multiplication of the existing epithelium. (2) In wounds which involve the whole thickness of the cornea, this growth of epithelium is preceded by the escape of the aqueous humour and the deposition of a mass of fibrin in the canal of the wound, which plugs the leak and allows the formation of the anterior chamber. (3) In very small wounds, the closure takes place without the interposition of the fibrin. (4) The form of the

* For description, see p. 510 of the present number of THE OPHTHALMOSCOPE. —S.S.

canal of the wound is not constant. (5) In the majority of cases the fibrin plug fills the greater part of the canal, reaching occasionally the level of the anterior surface of the cornea, but when the cut median layers come in contact, the fibrin occupies only the posterior part. (6) The fibrin plays no part in the repair. 7. The regeneration of the connective tissue is due to the multiplication of the connective tissue cells by indirect division, in the neighbourhood of the wound, and to the successive transformation of the new-formed cells into fibres. 8. The new-formed connective tissue differs from the normal tissue of the cornea both in its fibrous structure and the increased number of cells. It is covered on the surface by an epithelium thicker than normal. 9. Young cicatrices become by gradual change more compact and thinner, and the fibres become more regular in arrangement. 10. As a result of the gradual contraction of the scar, the tissue in the neighbourhood becomes stretched. 11. In punctures the repair never takes place by primary union of the lamellæ. 12. The endothelium regenerates; it covers the scar completely in from 10 to 15 days. 13. In advance stages of repair, there appears between the endothelium and the new tissue, a layer resembling the membrane of Descemet, but only one-third of its thickness, continuous with the cut edges of the posterior elastic membrane. 14. The elements of the blood take no part in the repair. 15. In aseptic wounds, no sign of inflammation or development of new vessels is observed.

H. GRIMSDALE.

III.—OPHTHALMIA NEONATORUM IN A BABY DELIVERED BY CÆSARIAN SECTION.

Terson, A.—Purulent conjunctivitis in a baby born after Cæsarian section. (Conjonctivité purulente chez un enfant né à la suite de l'opération Césarienne.) *Annales d'oculistique*, juillet, 1907.

Terson describes a case similar to those already reported by Veit, Cullingworth, and Jardine, where a baby developed purulent ophthalmia after delivery by Cæsarian section. The facts follow.—Dr. Tuffier performed Cæsarian section on a woman who, fifteen years previously, had gone through a most difficult *accouchement*, as the result of which the vagina and the recto-vaginal wall were extensively torn, so that a kind of ano-vaginal fistula persisted, which led to the uterus by means of an exceedingly narrow and tortuous passage. The section was

performed at term, without accident. As soon as the baby's head appeared in the uterine incision, it was noticed that the eyes were red, swollen, and secreting. Terson saw the case soon after the operation, and found that the baby was affected with a very intense purulent ophthalmia of both eyes. By treatment with silver nitrate and permanganate, the disease was cured in about ten days, without corneal complication. Hallion, who examined the pus from the inflamed eyes, reported the presence of staphylococci, together with diplococci, often grouped in tetrads, and staining well with Gram. The last-named micro-organisms presented the characters of the micrococcus tetragenus. SYDNEY STEPHENSON.

IV.—TATTOOING THE CORNEA.

(1) **Chevallereau and Polack.—On coloured tattooing of the cornea.** (**Du tatouage coloré de la cornée.**) *Ann. d'oculistique*, T. CXXXVI, p. 26, juillet, 1906.

(2) **Bailliart.—Tattooing the cornea.** (**Le tatouage de la cornée.**) *Bull. gén. de Thérapeutique*, 15 juillet, 1906.

(1) **Chevallereau and Polack**, after a *résumé* of the work previously done on the subject, give the results of an enquiry which they have carried out with a view to establishing a definite technique for the operation of tattooing the cornea, and choosing a series of non-irritating colours suitable for use in the procedure. For details the original article should be consulted. R. J. COULTER.

(2) According to **Bailliart,** Gallien appears to have been the first to tattoo the cornea by cauterising the surface with a red-hot instrument and then covering the parts with a preparation of copper or gall-nuts or the bark of pomegranate trees. The operation, however, was forgotten, until it was revived and modified by de Wecker, inspired by Abadie. It is now commonly performed, and renders great services both from the optical and the æsthetic point of view. Tattooing presents no dangers as long as the iris is not entangled in the corneal cicatrix. Under the latter circumstances nothing should be done as long as the eye appears irritable or the tension is raised. Indeed, it is advisable in such cases first to free the adhesions, supposing that to be possible. The operation of tattooing is simplicity itself when one has merely to conceal a mark which covers part of the pupil or iris. On the other hand, when a cornea is completely opaque, it is decidedly more difficult, since the object then is to imitate the pupil and the iris. If the stump of the eye be soft and small, it

is well to divide the four recti muscles some weeks before performing the tattooing, since that makes the stump more prominent and globular. First, the pupil in a case of total leucoma is outlined by a kind of stencil plate (*une sorte d'emporte-pièce*), so as to obtain an exact guide to the area to be blackened. The pupil is then obtained by the simple expedient of blackening the whole of the circular area included within the stencil outline. In order to imitate the iris, a larger stencil is employed, and the position of the greater circle of the iris is marked out on the cicatricial surface. Coloured substances have been employed for imitating the exact colour of the iris. Unfortunately, the pigments used up to now tend to dissolve out in process of time, so that coloured tattooing has been almost completely given up. de Wecker was in the habit of simulating the iris with Indian ink. To imitate the rays of the normal iris, he first traced the direction of these rays by means of the point of a cataract knife, and then pricked in with ink the furrows and sectors made in this way. The illusion was good. The emulsion of Indian ink must, however, be thin to reproduce a blue or grey iris, while for brown or chestnut it must be thicker and the needle punctures placed closer together. Several *séances* are required to produce the desired result. The operation is done under the local influence of cocaine and adrenaline. It is advisable at the end of each sitting to assure oneself by washing the eye with boiled water, that the ink has really penetrated into the substance of the cornea and does not merely lie upon the surface. SYDNEY STEPHENSON.

V.—CHRONIC SUPPURATIVE DACRYOCYSTITIS.

Tooke, Fred. T.—Chronic suppurative dacryocystitis and its radical treatment. *British Medical Journal*, December 22nd, 1906.

The micro-organisms found most frequently in cases of chronic dacryocystitis are the white, golden, and yellow pus cocci, along with streptococci. The saprophytes include, according to **Tooke**, the bacillus subtilis, radicosus, ramosus, luteus, fluorescens putidus, and saccharomyces. One case of actinomyces albus has been reported. Other organisms found under the circumstances are the diplobacillus of Morax-Axenfeld and the pneumococcus. Strictures in the majority of cases are due not to organic obstructions, but to an engorged condition of the subperiosteal veins, attributable to some defect in the nose, in the neighbourhood of the inferior or middle turbinated bones.

In a series of sixteen cases of chronic suppurative dacryocystitis, Tooke found that two suffered from deviation of the nasal septum, two from chronic rhinitis, one from hypertrophy of the anterior end of the middle turbinated bone, and two from syphilitic periostitis about the nasal duct. Heilmaier (*Zeitschrift f. Augenheilk.*, VI, p. 540), found that the nose was at fault in 220 of 352 cases of dacryocystitis. Twenty of Heilmaier's patients suffered from ulceration of the cornea. From a pathological point of view, Tooke distinguishes two varieties of diseased lacrymal sac: 1. those with small lumen and markedly thickened walls; and 2. those with dilated lumen and thinned walls. The mucous membrane is apt to show a number of tuft-like projections into the lumen of the sac. The epithelial lining is frequently polymorphous, and increased in thickness. Goblet cells are often numerous. The basement membrane cannot be recognised. Marked hyperæmia of the submucosa is present. The surrounding muscular tissue may also be infiltrated with round cells. The veins which surround the lacrymal sac are markedly engorged, with consequent obliteration of their lumen. In dilated sacs the mucosa consists of dense fibrous connective tissue containing few nuclei, while vessels are few and follicles absent. The epithelial layer is attenuated, and its cells are remarkably flattened. Tear-sacs in which suppuration has existed for years assume an atrophy of the walls which appears as scar tissue. **Treatment.**—Mild cases of dacryocystitis may escape recognition owing to a high crest of the lacrymal bone precluding pressure on the lacrymal sac, in which case there will be no regurgitation of secretion from the canaliculi. Another pitfall for the unwary is when the retained secretion escapes not from the puncta but by the nose. The last-named class of case, in Tooke's experience, is best treated by the syringe, which neither damages the sac nor injures the neighbouring tissues. In actual dacryocystitis surgeons are slowly becoming convinced of the fact that conservative measures, as the probe and the galvano-cautery, are unsatisfactory. Probes are condemned by Tooke unsparingly, and several bad results, as periostitis, rupture of ethmoid cells, false passages, and the production of cicatricial tissue, are attributed to their employment by unskilled hands. The galvano-cautery produces additional cicatricial tissue, thereby rendering strictures both more numerous and more complete without destroying the secreting membrane of the sac. Serotherapy has not proved trustworthy. Indeed, excision of the lacrymal sac by the Axenfeld method, under general anæsthesia, represents to our author's mind the ideal treatment for all except the very simplest cases of chronic suppurative dacryocystitis. SYDNEY STEPHENSON.

VI.—OCCUPATIONAL INJURIES OF THE EYES.

(1) Aubineau.—Accidents to the eyes due to occupation: a medico-legal study. (Les accidents oculaires du travail: étude médico - légale.) *L'Ophtalmologie Provinciale*, oct., nov., déc. 1904, jan. et mars, 1905.

(2) Sommer, G.—On the estimation of the working capacity in visual disturbances. (Zur Beurteilung der Erwerbsfähigkeit bei Sehstörungen.) *Wochenschrift für Therapie und Hygiene des Auges*, 9 November, 1905.

(3) Feilchenfeld, W.—On profitable employment after eye injuries. (Erwerbsfähigkeit bei Augenschäden.) *Zeitschr. f. Augenh.*, Februar, 1906.

(4) Terrien, F.—Malingering and industrial accidents. (Simulation et accidents du travail.) *Gazette des Hôpitaux*, 20 mars, 1906.

(5) De Micas.—The importance of immediate and complete examination of the eyes in cases of accidents and the advantage to the companies of having medical inspectors of accidents. (De l'importance de l'examen oculaire complet du blessé dès le moment de l'accident du travail et de l'avantage pour les compagnies d'avoir des médecines inspecteurs d'accidents.) *Recueil d'Ophtalmologie*, mars, 1906.

(6) Fergus, Freeland.—Eyesight in relation to compensation. *British Medical Journal*, December 29th, 1906.

(7) Jocqs.—Visual acuity and workmen's injuries. (Acuité visuelle et accidents du travail.) *La Clinique ophtalmologique*, 10 et 23 mars, 1907.

(8) De Micas.—The conditions of aptitude for work after eye injuries. (Des conditions de l'aptitude au travail après les traumatismes oculaires.) *Recueil d'Ophtalmologie*, avril et mai, 1907.

The communications abstracted below deal with various phases of injuries to the eyes of workmen, and allied questions.

(1) In this series of articles **Aubineau** discusses the effects of the various accidents which are liable directly or indirectly to interfere with the sight upon the earning capacity, and the duties of ophthalmic surgeons in cases in which compensation is claimed under the French law. R. J. C.

(2) **Sommer** presses for a better recognition of the personal disposition, and of the possible mental depression, of workmen claiming compensation for injuries. ERNEST THOMSON.

(3) **Feilchenfeld** has collected extensive statistics on this problem of industrial insurance, and comes to the conclusion that general rules are of little use, and each case must be decided on its own merits. He notes that in many cases complete destruction or blindness of one eye does not seem to interfere with work at all, although making it more difficult to obtain employment, while mere diminution of visual acuity in one eye, the other eye remaining good, more frequently gives rise to troublesome symptoms. A. LEVY.

(4) This is a quite general paper on the detection of malingering and on the course to be adopted when dealing with accidents to the eyes of workmen. ERNEST THOMSON.

(5) In cases of accidents at work the interests of the injured and insured are inevitably somewhat antagonistic to those of the insurer. The insurer is generally an insurance company, which makes every effort to pay dividends and to keep down expenses, and no doubt at times offers inadequate compensation, especially when it is able to "compound" with the injured workman. On the other hand, the workman is anxious to make the most of his injuries, and finds the drawing of compensation money an easy and agreeable occupation, and for this reason, and acting on the advice of friends, and—in England, at any rate—often on the advice of unscrupulous men of law, endeavours to exaggerate his injury and protract its recovery. Deliberate simulation is rapidly on the increase in all countries where laws of compensation are in force.

To avoid these abuses, **de Micas** suggests that the companies should appoint a medical expert for this class of work. His duties would be :—

i. To deliver a formal report within 24 hours of the accident.

ii. To advise the magistrate as to the necessity of a supplementary inquiry in the more serious cases.

iii. To treat the patient.

iv. To supply the court of inquiry—in the capacity of a medical expert—with a detailed account of the state of the patient and of the consequences of the injury.

Refusal on part of the patient to submit to the examination would render the above course of procedure impossible ; but such an action would not impress the court in favour of the workman. Where the result of the injury is uncertain, the examiner should not hesitate to say so. In all cases not finally settled, the inspector should keep in touch with the patient, either directly or through his medical attendant, so that he can advise the company of any change in the condition of the patient which would necessitate a revision of the award.

de Micas draws attention to the desirability of a medical

examination of the worker prior to the accident, and gives instances, which are common in the practices of experts who have to do with this class of work—where the results of old injuries or diseases, or of congenital malformations, have been ascribed to recent accidents, and in many cases the claims have been successfully made. The author further insists on the necessity for a complete and systematic examination of the patient immediately after the injury, so that such conditions as diabetes, tabes, etc., should not be overlooked and later ascribed to the injury. J. JAMESON EVANS.

(6) In this able, pithy, and withal short article, **Fergus** condemns the notion that any formula whatever would be of service in calculating compensation. He cites a number of really remarkable cases in which men with retinitis pigmentosa, and men with one eye, and that often a poor one (*e.g.* V.A. = fingers at 1 metre, due to incipient cataract) have earned full or nearly full wages as colliers, iron turners, boiler makers, blacksmiths, engine fitters, and so on. Fergus points out that much depends on the resource of the individual, and a great deal on the fact that there are many kinds of employment in which the form sense does not seem to play an appreciable part. High myopes, for instance, may work and earn good wages and yet be unaware that there is anything wrong with the eyes. He cites the case of a myope of 10 D. and 15 D. with better V.A. $\frac{1}{30}$, who had worked in a local pit, and who only realised that anything was wrong when he tried to obtain employment on the railway. In connection also with the question of compensation, Fergus points out that the injured man's truthfulness is impossible to estimate, and deprecates the habit which the expert witness possesses of swearing to a man's visual acuity, when in reality the witness is, possibly, quite ignorant of it: he depends, in cases where nothing is found during the examination to account for lowered acuity, upon the patient's statement. The article deserves to be read in the original by those interested in legal cases. ERNEST THOMSON.

(7) This is a somewhat general article on the subject of compensation for injury, in which **Jocqs** lays special stress on the necessity for very early examination of the visual acuity, in order that the injured person may not have time to foregather with those who may suggest simulation or exaggeration. The difference between "physiological" and "professional" visual acuity is discussed at some length. ERNEST THOMSON.

(8) **de Micas** discusses the question of workmen's compensation in its varied aspects, which includes: the relative utilitarian value of the two eyes; the influence of age on the working capacity in cases of ocular injury; working capacity after

various operations; the legal obligation of a workman to submit to medical or surgical treatment; working capacity apart from any diminution of visual function; effects of diminution of peripheral vision and of paralysis of the ocular muscles; working capacity where vision is reduced to one-tenth and other proportions; working capacity of the one-eyed and the legal responsibility of employer in case of loss from injury or disease of the sound eye: working capacity of workman or responsibility of employer in cases of traumatic hysteria; the division of trades and professions according to their visual requirements. These questions are discussed in relation to the French law of 1906, whose underlying principle is not stated. The author says that according to the law of 1898, a diminution in earning capacity was the essential basis for compensation. Whether this applies to the Law of 1906 is not stated. de Micas appears to deal with his subject more from the humanitarian than the legal point of view, and consequently his estimates often seem to favour the workman. We agree with him that it is not a medical man's place to be a "legislator" on this question; but if he sets himself up purely as a "redresser of wrongs," he is liable to become a law unto himself, but to no one else. Having made allowances for the author's "point of view," we find his reasoning sound and his paper highly interesting and instructive. The author draws attention to the common, but erroneous, belief, apparently sanctioned by courts of law, that capacity for work always bears a direct relation to visual acuity. He does not regard the right eye as having a greater utilitarian value than the left, but the left is more liable to injury. He is disposed to allow something for the popular impression that the loss of the right eye is a more serious matter than the loss of the left. He considers that an injured workman has no legal claim for any incapacity resulting from the effects of age alone, but suggests the allowance of 5 per cent. to 10 per cent. increase of compensation for diminished visual acuity and lessened capacity for re-education incident to advancing age. Lesondier is quoted on the legal obligation of a workman to undergo treatment, but the author considers that the patient should be allowed the privilege of submitting to or refusing operation, as the results thereof are so uncertain. An aphakic eye is estimated to produce a permanent partial incapacity of 15 to 25 per cent., according to the patient's occupation. Sympathetic irritation—photophobia, lacrymation, fatigue after work, etc.—although transitory and harmless, is of sufficient importance to be taken into consideration, as it may last some months and is apt to aggravate any slight ailment of the sound eye. Tables of values,

according to Groenouw, Magnus, and Schroeter, are given for restriction of the visual field and paralysis and paresis of the ocular muscles. The author accepts Truc's estimate of one-tenth as the minimum visual acuity necessary for the provision of the elementary necessities of life—the superior limit of blindness. It is interesting to note, however, that the French Ministerial Instructions (1905) have reduced the minimum visual acuity for active and auxiliary services from $\frac{1}{10}$th to $\frac{1}{20}$th. Trades and professions are divided into those requiring superior, good, and ordinary visual acuity with a special class of "ultra-visual occupations," where perfect vision in each eye is demanded. Except in special cases professional visual acuity is regarded as having double the value of the physiological visual acuity as long as the latter remains between ·50 and ·15. de Micas estimates the indemnity for the loss of an eye at from 15 per cent. to 33 per cent., according to the trade, except in the ultra-visual occupations, where the estimate is 50 per cent. These estimates represent reparation for real loss (of field, stereoscopic vision, etc.) without any regard to any alteration in working capacity. The author gives a table for the estimation of working capacity when both eyes are affected by the injury. With regard to sympathetic ophthalmia, de Micas accepts the view that there is no authentic record of sympathetic ophthalmia having developed later than seven weeks after preventive enucleation, *i.e.* enucleation performed at any time after the accident, provided that all signs of sympathetic ophthalmia are absent. The views of experts and the judgments of courts seem somewhat at variance on the question of indemnity in cases of loss of the working eye in a one-eyed man. Several readings of the law on this point are given. de Micas insists on the full wage-earning capacity of the workman with one eye, and consequently does not approve of the reduction of indemnity on the ground that he was incapable of earning full wages before the accident. Traumatic neuroses after ocular injuries require careful investigation and judgment in the interests of the patient, employer, and doctor. Simulation must be rigidly excluded.

J. Jameson Evans.

VII.—FAMILY NYSTAGMUS.

Apert, E., and Dubosc.—Nystagmus essential familial. *Ann. de Méd. et Chir. infantiles*, 1 décembre, 1906.

Apert and **Dubosc** report a remarkable series of cases of essential nystagmus in a family, and discuss the subject of

familial nystagmus generally. Cases of the kind, although perhaps not common, are, of course, well known to ophthalmologists.* Thus, Owen published a series of such cases affecting four generations of a family. McGillivray has reported movements of the head in association with the nystagmus. Audéoud has published the genealogical tree of a family counting seven examples of horizontal nystagmus in three generations consisting of nineteen subjects. Jacqueau has studied two cases of nystagmus, with associated movements of the head, in a mother and a daughter. The most complete study, however, we owe to Lenoble and Aubineau,† who reported about sixty cases of nystagmus, often with myoclonic movements, trembling of the head and sometimes of the entire body, quivering (*tressaulements*) of the muscles of the limbs, exaggeration of the knee-jerks, vaso-motor disturbances, and congenital dystrophies. Forty-two of the patients were derived from fourteen families. Lenoble and Aubineau, relying on the frequent co-existence of myoclonic disturbances of muscles in other parts of the body, regard these cases as a variety of myoclonus, localised chiefly or exclusively to the ocular musculature. The familial character of the disorder tells strongly in favour of their view, since several varieties of myoclonus are known to be family affections. These facts have led Lenoble and Aubineau to christen the condition "myoclonic nystagmus."

The cases described by Apert and Dubosc were characterised by the appearance of the nystagmus during the course of some febrile malady, as gastro-enteritis, measles, or scarlet fever, the absence of trembling of the head or extremities, of myxœdema, chorea, or of muscular shaking, the frequent exaggeration of the reflexes, especially on the right side, and, finally, the predominance of the female sex. The details of the cases were briefly as follows.—The mother, one of 15 children, of whom none others was affected, suffered from congenital strabismus, and also from slight nystagmus when she fixed an object in extreme abduction. There was no nystagmus when the eyes were at rest. This woman had been married twice. By her first husband she had had four children, and by her second, six children, and of the ten children by the two marriages three girls and two boys had more or less nystagmus. To go a little more into detail: of the children by the first marriage, three

*Ernest Clarke (The Ophthalmoscope, September, 1903), reported hereditary congenital nystagmus affecting 23 males in five generations of one family.—S. S.

†Lenoble et Aubineau.—*Archives de Neurologie*, 1902; *Société neurologique*, 1905; *Académie de médecine*, 1905; *Société de Biologie*, 1906; *Revue de médecine*, 1906.

unaffected children were dead, while one, now aged 13 years, had no nystagmus, although he was affected with fibrillary twitchings of the muscles of the lips, coming on every two or three minutes, and affecting especially the upper lip. The second husband, aged 38 years, was dyspeptic, and had always been subject to violent migraine, neuralgia, and pain. His mother had suffered from auditory hallucinations of a temporary nature. By this man, as already stated, there had been six children (three girls and three boys), and every one of the offspring were affected with nystagmus—essential and not symptomatic of any disease of the nervous system. At the same time, in three of the children, the knee-jerks were manifestly exaggerated. The fundi (examined by Antonelli) showed no particular ophthalmoscopic changes.

The authors think that their cases were affected with Lenoble and Aubineau's disease, namely, myoclonic nystagmus of the heredito-familial variety. It is to be noted that the mother came from Dinan, in the Cotes du-Nord—that is to say, from the same district whence most of the cases reported by Lenoble and Aubineau were derived. It is suggested that the ancient race of Bretons may be particularly subject to nervous maladies. In reference to the fact that in Apert and Dubosc's cases, girls suffered more than boys, which is contrary to the general rule, the authors explain the exception by saying : "*Chaque famille fait sa maladie familiale à sa manière, et la transmission se fait souvent selon les règles particulières à la famille observée.*"

SYDNEY STEPHENSON.

VIII.—THE OPHTHALMO-REACTION OF CALMETTE.

(1) **Calmette, A.—On a new way of diagnosing tuberculosis in man by the ophthalmo-reaction of tuberculine.** (Sur un nouveau procédé de diagnostic de la tuberculose chez l'homme par l'ophtalmo-réaction à la tuberculine.) *Gazette des Hôpitaux*, 25 juin, 1907.

(2) **Vallée, H.**—*Ibidem.*

(3) **Prouff.—The early diagnosis of tuberculosis by the ophthalmo-reaction.** *Gazette des Hôpitaux*, 6 août, 1907.

(4) **Calmette, A.—On the early recognition of tuberculosis by the tuberculine ophthalmo-reaction.** (Sur le diagnostic précoce de la tuberculose par l'ophtalmo-réaction à la tuberculine.) *Gazette des Hôpitaux*, 8 août, 1907.

Calmette (1) has employed a simple and practical method of ascertaining whether tuberculosis is present by dropping a little tuberculine into one eye. In order to avoid the irritating effects of glycerine on the conjunctiva, Calmette uses a solution of dry tuberculine, precipitated by alcohol at 95°, in distilled and sterilised water. The liquid, which must be fresh, has a strength of 1 per cent. When this solution is dropped into the eye of a healthy subject, no reaction follows. Those who suffer from tuberculosis, however, present a very definite local reaction, now known as the "ophthalmo-reaction of Calmette." Thus, 3 to 5 hours after the liquid has been placed in the eye, there is obvious congestion of the palpebral conjunctiva, which becomes of a lively red colour and the seat of more or less intense œdema. It is accompanied by lacrymation. At the end of six hours, filaments of fibrinous secretion may be seen in the conjunctival *cul-de-sac*. The reaction attains its maximum in from six to seven hours. It disappears after 18 hours in the child and after from 24 to 36 hours in the adult. The experiment produces no pain and but trifling discomfort. **Vallée** (2) criticises the method adversely. He believes that its diagnostic value is small, and that the pain and other consequences that result from it will preclude its use in man. **Prouff** (3), on the other hand, adopts a different view, as a result of his experience with the method. He has made seventy instillations, and every known tuberculous subject showed the reaction with the exception of one who was moribund. Prouff concludes with Calmette, therefore, that the reaction occurs in every tuberculous patient. Newly-born children are exempt or almost exempt from tuberculosis, and Prouff failed to excite conjunctival reaction by dropping tuberculine into the eyes of six babies, one day to one month old. Prouff points out that the reaction may exceed what is expected or desired, and may take the form of an episcleritis. In his last communication **Calmette** (4) claims that the ophthalmo-reaction allows one to establish with precision the diagnosis of tuberculosis in doubtful cases. Since the publication of his first note Calmette and his pupils have employed tuberculine on a large scale, and more than a thousand trials have been made by hospital physicians in Paris and the provinces. All observations go to prove that the ophthalmo-reaction can be obtained in all forms of tuberculosis, unless the patient is moribund or almost so. Newly-born babies fail to show the reaction. The application is inoffensive on condition that the non-glycerised preparation be employed. It is capable of rendering great clinical service in the recognition of the most varied forms of tuberculosis, and should be looked upon as simple, trustworthy, and harmless.

SYDNEY STEPHENSON.

IX.—TREATMENT.

(1) **Terson, J.—The treatment of sclerotising keratitis of tuberculous origin and marginal corneal ulcers with subconjunctival injections of sterilized air.** *Die Ophth. Klinik*, Dezember, 1906.

(2) **Darier, A.—Intravenous injections.** *Annals of Ophthalmology*, January, 1907.

(3) **Grossmann, Karl. — Dionin in ophthalmic practice.** *Folia Therapeutica*, April, 1907, and *Amer. Journ. of Ophthalmology*, July, 1907.

(4) **Bunting, T. L.—Roentgen rays in the treatment of ulcerative blepharitis.** *Lancet*, April 13th, 1907.

(5) **Kayser, Joh. - Some experiences with dionin. (Einige Erfahrungen mit Dionin.)** *Wochenschrift f. Therapie und Hygiene des Auges*, 9 mai, 1907.

(6) **Ryerson, G. Sterling.—Recent advances in ocular therapeutics.** *Canada Lancet*, July, 1907.

(7) **Bordley, James, Junior. — Treatment of trachoma.** *Ophthalmic Record*, July, 1907.

(1) **Terson** records a case of tuberculous sclerotising keratitis which he treated successfully with subconjunctival injections of sterilized air. The patient was a young man, *æt.* 20, who was suffering from a chronic orchitis, which was looked upon as tuberculous. He denied having had gonorrhœa or syphilis. The eye presented three small nodules at the lower margin of the cornea, surrounded by some cloudiness of the cornea. The disease had begun with localized infection of the conjunctiva and episclera opposite the corneal affection. After one subconjunctival injection the patient could bear the light quite well next day, and there was less irritation. After a second injection three days afterwards, lacrymation ceased, and the eye could be opened as well as the healthy one. After the eighth injection the corneal opacity had diminished considerably, and the patient could be regarded as cured. A case of marginal ulcer with iritis of syphilitic origin, and another case of superficial corneal ulcers also improved rapidly when these injections were tried.

PERCIVAL J. HAY.

(3) In **Grossmann's** opinion, dionin is a drug which, if used with discrimination, is not likely to be omitted from the ophthalmic surgeon's outfit. He enumerates a variety of

conditions in which he has found dionin of service, such as detached retina, iritis serosa, herpes corneæ, pannus, corneal ulcers, phlyctenular keratitis, and so forth.

(4) A severe and long-standing case of ulcerative blepharitis, which had followed measles, was successfully treated by **Bunting** with X-rays. Exposures of from eight to ten minutes were given about every five days, and during the process the lids were kept closed and the healthy skin was covered by a leaden shield provided with a horizontal slit large enough to expose the diseased surfaces. Spark-gap, $3\frac{1}{2}$ to 5 inches ; rays, 3-7 Benoist. After 24 exposures patient practically cured.

(5) **Kayser** writes an enthusiastic little article on the virtues of dionin, more especially in the clearing up of various corneal opacities and pannus. In these cases he applies it usually as an insufflation, at first daily while chemosis and injection of the eyeball result, and then, when the reaction becomes less marked, he spaces out the intervals between the applications. He is also of opinion that it has a good influence on wounds and after operations, and also in ulcer and iritis cases, used along with atropin and hot applications. "Dionin has to me become a straightforward, essential, and daily form of treatment in various eye cases." ERNEST THOMSON.

(6) **Ryerson** discusses the newer remedies used in eye work under four heads : (1) local anæsthetics ; (2) drugs acting on iris and ciliary muscles ; (3) drugs affecting the vascular state of the eye ; and (4) astringents and antiseptics and other local remedies. (1) Stovaine is an ideal local anæsthetic, and may be injected freely beneath the conjunctiva. Alypin is the local superficial anæsthetic *par excellence*. Ryerson has witnessed most remarkable cures of corneal opacities by the use of dionin, which is also most useful in hastening the absorption of blood or lymph from the interior of the eye. (2) Scopolamine is useful as a substitute for atropine. Euphthalmine is of service where it is desired to make a complete ophthalmoscopic examination of an eye without at the same time causing paralysis of the accommodation. (3) Adrenalin "as a remedy is useful in all conditions of the eye attended by hyperæmia." (4) Argyrol in 5 per cent. to 50 per cent. solutions occupies the first place in the treatment of suppurative conditions of the eye. Ryerson has never seen staining from its employment. Protargol is valuable, but inferior, in the writer's opinion, to argyrol. Ryerson has found alphazone an efficient local disinfectant. Ichthargan has proved useful in blepharitis, and mercurol in trachoma. Ryerson, in conclusion, gives the results of other surgeons with the sodium salts, brometone, spermine, and jequiritol. S. S.

(7) **Bordley** treats trachoma by vigorously rubbing the

everted lids with a cotton-wrapped match stick covered with boric acid. An active pannus or ulceration is treated on similar lines, although with less vigour. The operation is repeated every day for two weeks, then every other day for ten days, and lastly as may be found necessary. Ten weeks represents the maximum time that Bordley has found it necessary to continue the frictions.

S. S.

X.—THE OCULAR COMPLICATIONS OF MUMPS.

(1) **Woodward, J. H.—The ocular complications of mumps.** *Annals of Ophthalmology*, January, 1907.

(2) **De Micas.—Iritis and mumps.** (L'iritis et les oreillons.) *Recueil d'ophtalmologie*, juillet, 1907.

Two important communications have lately been published, one by Woodward and the other by de Micas, the former dealing comprehensively with the ocular complications of mumps, and the latter with the iritis set up in some rare cases by that epidemic affection.

(1) **Woodward** takes up the subject from almost every conceivable point of view, relates a case of neuro-retinitis from mumps that fell under his own observation, and concludes his article with an abstract of all cases found in literature where eye diseases were thought to be the outcome of epidemic parotitis. The fact that some thirty communications by American, English, French, German, and Italian authors have appeared attests that mumps, so far from being the harmless malady it is often assumed to be, is a disease endowed with a potentiality for evil as regards the eyes that should be neither despised nor overlooked The ocular complications most frequently supervene during convalescence from mumps, although abscess of the lids and acute inflammation of the lacrymal gland have in a few instances been known to precede the symptoms of the ailment. The toxin theory, although still unproved, appears to be the most rational way of attempting to account for the ocular and other metastases of mumps. An analysis of the ocular lesions shows that the affections most frequently observed have been—conjunctivitis (28 cases), optic neuritis and neuro-retinitis (23 eyes), dacryoadenitis (14 cases), iritis (6 eyes), optic atrophy (6 eyes), retrobulbar neuritis (3 eyes), and paralysis of accommodation or of extra-ocular muscles, each 3 cases. The rarer complications have included keratitis, abscess of eyelid, hemeralopia, and amblyopia. The course of the complications is, generally speaking, towards recovery. Nothing hitherto

observed in the characters of an attack of mumps can be construed as indicating that an ocular complication is likely to occur. The details of Woodward's case of neuro-retinitis following mumps have been published elsewhere (*New York Medical Journal*, January 2nd, 1904), but its salient features may be briefly recalled.—A girl of eleven years developed mumps in February, 1902. She resumed her school work some three weeks after she was taken ill, but complained of attacks of vertigo and of momentary failure of sight in her left eye, which was congested and watered. Later, there was severe pain in the eye and permanent dilatation of the pupil. When seen by an ophthalmologist on March 27th, sight was equal only to perception of light, and the ophthalmoscopic picture resembled that of thrombosis of the central vein. Anterior sclerotomy was performed. The eye became blind and staphylomatous, and so was removed in August, 1905. Pathological examination by F. E. Sondern showed anterior synechiæ, obliteration of Fontana's spaces and of Schlemm's canal, atrophy of the ciliary body and processes, cortical cataract, disorganisation of retina and choroid, and hyaline degeneration of the fibres of the optic nerve. The case was pronounced to be one of proliferating neuro-retinitis, due to mumps.

(2) **de Micas** mentions cases of iritis due to mumps described by Péchin, Collomb, and Villard respectively, and then relates an analogous personal observation met with in a man, aged 21 years, who developed double orchitis and iritis after an attack of epidemic parotiditis. When seen by de Micas, some seven weeks after the beginning of the eye inflammation, he was found to present all the symptoms of sub-acute iritis of both eyes. The patient made a slow recovery. de Micas concludes from his own case and those of others that mumps, although rarely, may provoke iritis, characterised by bilaterality, moderate inflammatory phenomena, posterior synechiæ, and sometimes by considerable lowering of the visual acuity. The iritis of mumps presents, however, no truly pathognomonic signs which enable it to be distinguished from other forms of inflammation of the iris. SYDNEY STEPHENSON.

XI.—OPERATIONS.

(1) **Trousseau, A.—An æsthetic oculo-palpebral repair; tenotomy of the four recti muscles followed by tattooing of the cornea. (Réparation esthétique oculo-palpébrale; ténotomie des quatres muscles droits, puis tatouage de la cornée.)** *La Clinique ophtalmologique*, 10 janvier, 1905.

(2) Cheney, Frederick E.—The question of iridectomy in glaucoma simplex. *Ophthalmology*, April, 1905.

(3) Jocqs, R.—A few words on extirpation of the lacrymal sac. (Quelques mots sur l'extirpation du sac lacrimal.) *La Clinique ophtalmologique*, 25 janvier, 1906.

(4) Jocqs, R.—Complete ectropion of the lower lid cured by vertical cauterizations of the palpebral conjunctiva. (Ectropion total de la paupière inférieuse guéri par les cautérisations verticales de la conjonctive palpébrale.) *La Clinique ophtalmologique*, 25 mars, 1906.

(5) Macphail, James M.—Notes on ophthalmic surgery. *Indian Medical Gazette*, April, 1906.

(6) Primrose, William.—A new method of operating in pannus. *Lancet*, 21st April, 1906.

(7) v. Blaskovics, L.—On conjunctival and tarsal excisions in trachoma. (Ueber Bindehaut und Tarsusexzisionen bei Trachom.) *Zeitschr. f. Augenheilk.*, Mai, 1906.

(8) Kugel, L.—On a new operation in secondary cataract and occlusion of the pupil after cataract operation. (Ueber eine neue Operationsmethode bei Nachstaren und Pupillensperre infolge von Staroperationen.) v. Graefe's *Archiv f. Ophthalmologie*, Bd. 63, 3 Heft, 22 mai, 1906.

(9) Elliot, Major R. H.—A further note on irrigation in cataract extraction. *Indian Medical Gazette*, June, 1906.

(10) Abadie.—On the indications for iridectomy in cases of irido-choroiditis. (Des indications de l'iridectomie dans les irido-choroïdites.) *Ann. d'oculistique*, T. CXXXV, p. 441, juin, 1906.

(11) Wieden.—The treatment of pterygium, with special reference to a severe case of that disease. Del tratamiento del pterigion a proposito de un caso grave del mismo.) *Archivos de Oftal. Hisp.-Amer.*, July, 1906.

(12) Wilder, William H.—Paraffin plates as an aid in operations for extensive symblepharon, and for the restoration of culs-de-sac for prothesis. *Journal of the American Medical Association*, 25th August, 1906.

(13) Lagrange.—Congenital ptosis of the right upper lid (Motais' operation). [Ptosis congénital de la paupière supérieure droite (Opération de Motais).] *L'Ophthalmologie Provinciale*, III, 17 septembre, 1906.

(14) **Bassa.—Congenital ptosis (Motais' operation).** [Ptosis congénital (Opération de Motais).] *L'Ophtalmologie Provinciale.* III, 88, septembre, 1906.

(15) **Bonté, D.—The new method for the cure of symblepharon.** (Le nouveau procédé pour la cure du symblépharon.) *La Clinique ophtalmologique*, 25 septembre, 1906.

(16) **Fromaget.—Double acquired ophthalmoplegia externa: Operation for ptosis by advancement of the levator combined with Dransart's sutures.** (Ophtalmoplégie externe double acquise: Opération du ptosis par avancement du releveur combiné aux sutures de Dransart.) *Ann. d'oculistique*, T. CXXXVI, p. 270 octobre, 1907.

(17) **Thilliez.—Treatment of ectropion by cauterisation of the conjunctiva and blepharorraphy.** (Traitement de l'ectropion par la cautérisation ignée de la conjonctive et la blépharorraphie.) *Ann. d'oculistique*, T. CXXXVI, p. 392, novembre, 1906.

(18) **Motais.—Ptosis operation by substitution of the superior rectus, combined with resection of a flap of the upper eyelid.** (L'opération du ptosis par la suppléance du muscle droit supérieure combinée avec la résection d'un lambeau de la paupière superieure.) *L'Ophtalmologie Provinciale*, T. III, p. 119, novembre, 1906.

(19) **Lagrange.—On the treatment of malignant intra-ocular tumours.** (Traitement des tumeurs malignes intraoculaires.) *L'Ophtalmologie Provinciale*, T. III, p. 129, décembre, 1906.

(20) **Snydacker, E. F.—Blepharoplasty by means of a pedunculated skin flap taken from the neck.** (Lidplastik mit gestieltem Lappen von Halse.) *Klin. Monatsbl. f. Augenheilkunde*, Januar, 1907.

(1) **Trousseau** having been asked to enucleate an atrophic eyeball in an 18 year old girl for cosmetic reasons, advised operative treatment of a different kind. In order to let the eyeball come forward he first tenotomised the recti, and afterwards increased the length of the shortened palpebral fissures by canthoplasty, removing at the same time a portion of the orbicularis and tarsus to lessen the false ptosis which existed. Following these procedures the cornea was tattooed at several sittings. The patient was satisfied but for the fact that there were no cilia in the upper lid border. To satisfy this require-

ment Trousseau finished up by tattooing the skin so as to imitate the appearance of eyelashes. Trousseau is well satisfied with the result of his efforts, and the patient's ability to obtain employment has been increased. ERNEST THOMSON.

(2) As opinions as to the value of iridectomy in glaucoma simplex differ, **Cheney** believes that it is probable that the majority of men who do an iridectomy in this disease operate with the hope of delaying its progress rather than with any expectation of bringing the disease process to a standstill. There are a certain number of authorities, however, he states, who regard the condition as curative, at times, and who report cases in support of such belief. On the other hand, observers of equal ability and long experience express the opinion that the disease is one which is not benefited by operation, and in consequence, have ceased to resort to operative procedure.

The author thinks that theoretically an iridectomy is advisable; this he bases upon the fact that it is of unquestionable benefit in reducing tension in acute and chronic congestive glaucoma; and although this reduction in tension is what we should try to obtain in simple glaucoma, the question as to whether or not the tension, as determined by ordinary palpation, is above normal, is, it seems to him, of no certain value in deciding for or against an operation; for he says: "What is abnormal tension for one eye is not for another, and marked variations may be expected in apparently healthy eyes of different individuals, especially in the latter part of middle life and in old age." He further states that the fact that the intraocular tension of a given eye has produced a glaucomatous cup is sufficient proof that the tension is supranormal for that eye. In this class of cases, therefore, a glaucoma might be said to exist when the tension of the eye is of such a degree that it results in a glaucomatous cup, be it supranormal, normal, or even (if such a condition can be supposed) subnormal, as compared with what may be ordinarily regarded as normal tension.

"Admitting that iridectomy is a perfectly rational procedure in glaucoma simplex, and that it may bring the process to a permanent standstill in a few cases and delay the progress of failing vision in others, there are, nevertheless he states), certain questions to be carefully considered in each individual case before operation should be advised. There are two facts deserving special prominence in this connection: one is that the eye may retain useful vision for years if not interfered with; and the other, that absolute and permanent blindness may quickly follow as a direct result of iridectomy. Iridectomy in glaucoma is not a simple operation, and, while its value in the

acute and chronic congestive varieties is so unquestionable that it is rarely contraindicated, the possibility of an unfortunate result must not be lost sight of when it is a question of operating in this slowly progressive form of disease."

No general rules, he believes, can be made as to what cases should be operated upon and what ones left alone ; good central vision, good color perception, a good field of vision, etc., do not of necessity indicate that operation is desirable in any given case. The disease is not, as a rule, one of early life, and its extremely slow progress in most instances, the life probability as indicated by the patient's age, general condition, and ancestry, and the possibility of blindness resulting from operative interference, are all points that are too often disregarded.

C. A. O.

(3) **Jocqs**, in extirpating the lacrymal sac, makes a vertical incision and cleans out the contents, then stuffs the cavity with absorbent cotton, but only to a degree as will still permit of the meeting of the edges of the incision. These edges are then seized with toothed forceps and the sac separated from its connections. The duct is probed to render it sufficiently patent to act as a drain during healing, the wound is then stitched up and a wedge-shaped dressing made up of pads of increasing size tightly bandaged over it. The pressure is maintained for five or six days, after which the stitches are removed and more moderate pressure kept up for a few days longer. ERNEST THOMSON.

(4) **Jocqs**, in treating senile ectropion, makes from one to several deep narrow cauterizations, extending from the bottom of the cul-de-sac to the lid border. In bad cases, he does a median blepharorrhaphy of three or four millimetres, and keeps up the union for fifteen days. ERNEST THOMSON.

(5) **Macphail** furnishes a report on 4,848 eye operations, representing seven years' work at the Mission Hospital at Bamdah, in the Monghir District, India. It affords a good example of the unostentatious work done in outlying places in India under primitive conditions and without trained assistance. Rather more than half the operations, 2,596, were cataract extractions. Macphail operates with a conjunctival flap, controlling the hæmorrhage with adrenalin instilled beforehand. Fourteen dislocated lenses were removed, with only two losses of vitreous. Vision improved in all these cases, except in one eye which suppurated. Six eyes were operated upon in lepers ; they all did well. In 22 eyes, with total adhesion of iris to capsule, Wenzel's operation was performed. Fair vision was restored in all but 3 of these eyes.

In 104 selected cases intra-capsular extraction was performed without iridectomy. The total number of vitreous losses was

29. This compares badly with a previous series of 100 ordinary extractions, which furnished only 5 vitreous escapes. The capsule was accidentally ruptured in 14 of the 104 operations, including 4 cases in which there was also escape of vitreous. Prolapse of iris occurred in 17 eyes, including 3 with loss of vitreous. In the 100 ordinary operations there had been 7 prolapses. Four eyes suppurated. Author adds that the results would doubtless have been better if he had had skilled assistance.

In 211 patients he extracted cataracts from both eyes at the one time, and in no instance had there been cause to regret it. Although 10 of these eyes suppurated, the accident never occurred in both eyes of the one patient.

Of the total operations 1,140 were iridectomies. About one-third of these were for glaucoma, mostly chronic. The results were not, on the whole, satisfactory. H. HERBERT.

(6) **Primrose** treats pannus by producing extravasation of blood into the subconjunctival tissue surrounding the cornea. In order to effect this, he punctures one of the large blood-vessels through the conjunctiva with a Beer's knife at a distance of 2 mm. or 3 mm. from the margin of the cornea. The underlying idea appears to be that the vessels of the pannus become occluded by pressure and the formation of a coagulum.

(7) This is a paper in which **v. Blaskovics** reports his results with Kuhnt's methods of the operative treatment of the results of trachoma shrinkage of the conjunctival sac, and distortion of the tarsal plates, and, on the whole, his results have been very favourable. A. LEVY.

(8) This method applies in the first instance to postoperative occlusion of the pupil, where the adhesion affects the whole margin or even the whole posterior surface of the iris. The usual methods (Graefe, Wecker, Da Gama Pinto) do not, as a rule, give favourable results. This is due to the considerable hæmorrhage which leads to "organisation" and the filling-up of the new pupil, to the tearing of the ciliary body, and to the loss of vitreous. To avoid these complications **Kugel** thinks it best to attack the weakest spot of the diaphragm, where there are least vessels, *viz.*, the place of the former pupil. He does so by thrusting a Graefe knife through the line of attachment, withdrawing it, then repeating the cut at an adjoining point and so on till the whole pupillary border is, as it were, cut out. The new pupil looks quite black with only a thin netting of fibres crossing over it. This can, if it seems advisable, be extracted with a thin forceps and in doing so it is advisable to prop the iris up by a discission needle which is passed behind the iris. The whole operation in a typical case is described by Kugel in

the following manner: speculum, fixation by assistant. An angular needle is thrust through the inner corneal margin and passed along the posterior surface of the iris to the outer border of the pupil. This needle is held in the left hand. The right hand passes a cataract knife from the outer margin of the cornea into the anterior chamber and cuts through the pupillary membrane in four points in the way described above; in withdrawing it the incision is somewhat enlarged (to about 3 mm.), a Fisher forceps introduced, the threads caught and extracted. Kugel has performed the operation in five cases with extremely gratifying results and has also used it latterly for ordinary secondary cataract, where he used hitherto to extract in the usual way. R. GRUBER.

(9) **Major Elliot** again speaks highly of the value of McKeown's irrigation, after an experience of its use in nearly 2,000 cases since April, 1903. He lays stress on its use in replacing iris and lens capsule within the anterior chamber. For this purpose he tries irrigation first under the lower margin of the iris, then, if necessary, on the lips of the wound from outside, and, thirdly, over the anterior surface of the iris, the nozzle being introduced into the anterior chamber. If these methods fail he replaces the iris with a curette, or draws the pillars of the coloboma into position with iris forceps. Where iris is retained in the wound by cheesy cortex impacted behind the scleral lip of the wound, the lens matter is dislodged by a stream of fluid directed backwards or even backwards and upwards. If this fails, Major Elliot seizes with iris forceps a portion of the anterior capsule, which can be seen hanging down into the chamber, and draws it towards the centre of the pupil. He thus everts the upper cul-de-sac of the capsule and thereby empties its contents into the anterior chamber. In dealing with Morgagnian cataracts and those with abundant soft cortex, Major Elliot washes out the whole of the lens substance, including the nucleus, with the irrigator. H. HERBERT.

(10) **Abadie** considers that in cases of irido-choroiditis which do not yield to the usual local and general treatment, iridectomy is useful, not only when frequent relapses are caused by partial synechiæ, and when the eye becomes glaucomatous owing to total posterior synechiæ, but also when the condition of the eye becomes worse or even ceases to improve without anything to account for its doing so. He states that in such cases the aqueous becomes a culture medium for infectious germs, and that an iridectomy by permitting it to flow away more completely and for a longer time than a paracentesis would, acts somewhat in the same way as the evacuation of ascitic fluid in tuberculous peritonitis, while it also allows what is going on behind the iris

to be seen, disclosing in some cases large exudations the existence of which was not previously suspected, and in others smaller exudations limited to parts of the posterior surface of the iris. The author urges the necessity of energetic local and general treatment, both before and after iridectomy, and speaks highly of the value of mercury and salicylates, even in cases in which no constitutional cause can be discovered.

(11) **Wieden's** patient was almost blind from a very extensive pterygium in each eye. He adopted for the cure a special operation. He divided the membrane just within the corneal margin and resected a portion of the pterygium about 4 mm. in breadth. Into the gap thus left he transplanted a flap of conjunctiva. The head of the pterygium he left *in situ*, knowing that without blood supply it would diminish in size ; later, he detached the atrophied mass from the cornea by means of a fine pair of forceps and a Graefe's knife. Wieden lays stress on the fact that by such an operation, the cornea is as little as possible damaged. The resulting scar, in the patient under consideration, cleared greatly under the application of electrolysis. HAROLD GRIMSDALE.

(12) The method that **Wilder** employs, which is a modification of the plate or prothesis plan, has proved so successful in his hands in a number of difficult cases, that he ventures to recommend it. "Metal plates, preferably of soft sheet lead or block tin, that can be easily cut to any size or moulded to any shape (he says), are coated with hard paraffin of high enough melting point so that the temperature of the body will not melt it and so expose the metal plate. Such a paraffin plate is perfectly smooth and can do no harm to the cornea."

In operation on cases of obliteration of the conjunctival sac, the eyeball being absent, he uses a paraffin plate of a size large enough to fill out both culs-de-sac, and in the centre of this plate there are two or three holes, through which the orbit can be easily irrigated while the plate is in position.

His conclusions in regard to the method are as follows :— "The advantage of a plate for holding mucous or Thiersch grafts in place in the fornix of the eyelids is obvious. The advantages of the paraffin plate is that it can do no harm to the cornea. It can be built up as required to fit any conjunctival cul-de-sac that has to be lined with a Thiersch graft. The graft adheres to the paraffin, so that it can be evenly smoothed out on it, and thus perfect coaptation is secured between the graft and the raw surfaces of the cul-de-sac. To accomplish this, the graft should be thin and large enough to cover all raw surfaces, no sutures being required. With perfect coaptation the graft will have secured a firm hold at the end of forty-eight hours, and the plate can be removed for cleansing the eye. In the case of

restoration of the socket for prothesis, it may be left in place for a considerable time, for the sac can be cleansed by irrigation through the holes in the plate. If it is so large that there is difficulty in removing it, it can be cut in two and the subsequent treatment continued with a plate that can be more easily inserted." C. A. O.

(15) **Bonte** gives a detailed description of the method of Thilliez, which consists in the interposition of a fold of silk between the raw surfaces. For a proper understanding of the procedure, reference must be made to the original.

ERNEST THOMSON.

(16) **Fromaget's** patient, a boy, aged 7, had external ophthalmoplegia, practically complete, which had come on gradually in both eyes. Under treatment with Hg. the mobility of the eyes improved considerably, but the ptosis still persisted. As the superior recti were defective, Motais' operation was contra-indicated, and Fromaget performed de Lapersonne's operation (advancement of the levatores). In the left eye, which was done first, the stitches gave a little, and the result was therefore incomplete. To avoid this in the right eye, two Dransart's sutures were inserted, in addition to the stitches required for the advancement, and were left in for ten days. The result was satisfactory. The cure of the left ptosis was completed by the subsequent insertion of Dransart's sutures.

(17) In 1900, **Thilliez** published a paper (1) recommending for the treatment of sarcomatous ectropion, vertical cauterisation of the conjunctiva, followed by blepharorraphy. Since then he has continued to use the method, and claims to have had uniform success without any relapses. His practice is to unite at least half the margins of the lids and leave them joined for a month, but he quotes as having obtained good results with a median blepharorraphy freed at the end of a fortnight. R. J. C.

(18) **Motais** claims that after his operation for ptosis the movements of the lid is always satisfactory, but admits that in certain cases the static result is insufficient, *i.e.*, when the patient looks straight forward the lid of the operated eye is lower than it ought to be. He considers that this is caused by (*a*) unusual heaviness or thickness of the lid ; (*b*) adhesions of the conjunctiva or sclerosis of the eyelid resulting from trachoma ; (*c*) insertion of the tongue of tendon into the tarsus too high, either from faulty operation or from slipping of the sutures, the latter usually owing to removal of the binocular bandage earlier than the eighth day. If at the end of the month the lid is not sufficiently raised, he performs the following supplementary operation (1)

(1) *Journal des Sciences Médicales de Lille*, 24 mars, 1900.

the lid is fixed in a Desmarres clamp, and an incision through its entire thickness is made parallel to and 3mm. from the ciliary margin from end to end of the part included in the clamp; (2) the ends of the first incision are joined by a second curved incision with its highest point opposite to the centre of the first incision. The height of the flap at this central point should be equal to, or, ½mm. greater than the drooping of the lid, which requires correction; (3) the flap is removed with scissors; (4) the soft parts and tarsus are united by four or five sutures.

To the objection that in doing this operation there is a risk of cutting through the tongue of tendon originally transplanted, Motais replies that experience and measurements show that this does not happen.

(19) **Lagrange** describes three ways in which intra-ocular tumours spread to the orbit:—1. Through the natural openings at the disc and at the corneo-iridic angle. 2. Along the vessels. 3. By diffuse infiltration of the sclerotic. He finds that even in cases in which the neoplasms seem confined to the eyeball there is frequently evidence that cells from them pass along one or other of these paths, and is of opinion that, except in cases of glioma endophytum at an early stage and of fusiform leuco-sarcomata of the uveal tract, excision of the eyeball is not a sufficiently radical operation and should be replaced by subconjunctival exenteration of the orbit. He performs this operation as follows: The external canthus is divided and a horizontal incision is made on each side of the eyeball through the conjunctiva, which is dissected upwards and downwards, so as to expose the whole anterior part of the globe. The orbital tissues are then separated from the periosteum with an elevator, and divided as far back as possible with a curved scissors, any remains of the optic nerve, etc., which may be left behind being subsequently removed. Hæmorrhage having been checked by pressure or ligature, the conjunctiva and external canthus are united by sutures, a drain being put into the orbit. The cavity left in the orbit after this operation becomes filled with granulation tissues, and a prothesis can be worn which is fairly satisfactory but immobile.

When a tumour has obviously spread to the orbit, Lagrange considers that this operation is insufficient, and advises complete exenteration of the contents of the orbit, including the periosteum.

(20) In two cases of cicatricial ectropium after burns, **Snydacker** employed with great success a skin flap which he took from the neck. The lid was first freed and all scar tissue removed by dissection, and the palpebral fissure sutured. Then a skin flap was formed which had its pedicle at the angle of the jaw and

reached down to the clavicle following the direction of the sterno-mastoid muscle. The flap was turned upwards across the cheek and its end fastened to the lid. As in one of the cases both lids of the eye were affected, a slit was made in the free end of the flap, so that two secondary flaps resulted with a common basis at the outer canthus. The wound in the neck was closed. After six days the flap was severed at the canthus and angle of the jaw and removed. But it might have been cut at the first place only, turned downwards, and re-implanted in its original place in the neck. C. MARKUS.

REVIEWS.

Bulletin de la Société belge d'Ophtalmologie, No. 22. Compte rendu analytique des communications faites à la vingt-et-unième réunion de la Société à Bruxelles, le 28 avril, 1907. Bruxelles: Imprimerie Scientifique L. Severeyns, 44, Montagne-aux Herbes-Potagères, 1907.

The present volume of the Belgian Ophthalmological Society contains an account of the proceedings at the meeting on April 28th, 1907. In addition to Society news, there are articles by Leplat, Bettremieux, van Duyse, Brandès, Stocké, Delneuville, and Gauthier.

SOME YEAR-BOOKS OF OPHTHALMOLOGY.

(1) **The Ophthalmic Year Book, Vol. IV.**, containing a digest of the literature of ophthalmology, with index of publications for the year 1906. By EDWARD JACKSON and GEORGE E. DE SCHWEINITZ, assisted by THEODORE B. SCHNEIDEMAN. The Herrick Book and Stationery Company, Denver, Colorado, U.S.A. 1907. Pp. 320.

(2) **The Practical Medicine Series**, comprising ten volumes, on the year's progress in medicine and surgery, under the general editorial charge of GUSTAVUS P. HEAD. Vol. III. The Eye, Ear, Nose, and Throat. Edited by CASEY A. WOOD, ALBERT H. ANDREWS, and GUSTAVUS P. HEAD. Series, 1907. Chicago: The Year-Book Publishers, 40, Dearborn Street.* Price 1.50.

*Sole agents in the United Kingdom, G. Gillies & Co., 28, Gibson Street Glasgow, N.B.

(3) **La Pratique Ophtalmologique, 1906.** By Dr. A. VAN LINT. Bruxelles: Imprimerie Scientifique L. Severeyns, 44, Montagne-aux Herbes-Potagères. 1907.

The mass of literature dealing with ophthalmology scattered through periodicals in all parts of the world renders the possession of a year-book a first necessity to everybody who desires to keep abreast of current knowledge. We have before us three books of the kind, namely, Jackson and de Schweinitz's (1), Head's (2), and van Lint's (3). All are good of their kind, but we do not hesitate to bestow the palm on **Jackson** and **de Schweinitz's** compilation, now in the fourth year of issue. This book well fulfils the purpose of its editors, which is "to render the best of current literature available to all who practise ophthalmic medicine and surgery, as well as to furnish bibliographical aid to the thorough student." It is liberally illustrated, and includes 55 per cent. more material than the first volume published in 1904. It gives a number of brief but interesting biographic notices of recently deceased ophthalmologists. We cordially recommend the book for purposes of reference. **Head's** volume (2) is on a more modest but perhaps not less useful scale. It also is illustrated. The portion of the volume which deals with ophthalmic subjects affords interesting reading to one who desires to keep in touch with the progress of eye work. The feature of the volume is perhaps its readability, and the lucid nature of its contained abstracts. **van Lint's** book (3), in its first year of issue, is prefaced by an introduction by Dr. Henri Coppez, of Brussels, in which that distinguished correspondent of THE OPHTHALMOSCOPE outlines the nature of the work. The peculiarity of the book is that the work is arranged according to the month in which it appeared, a plan that has drawbacks as well as advantages. A few illustrations are given. The aim of van Lint's book is essentially practical.

Selected Essays on Syphilis and Small-Pox (translations and reprints from various sources). Edited by ALFRED E. RUSSELL, M.D.Lond., M.R.C.P. With illustrations and charts. London: The New Sydenham Society. 1906. Price, 10s. 6d. *nett*.

The New Sydenham Society, although unhappily now fallen upon evil days, has laid the medical profession under many obligations, not the least important of which is the publication of the present volume, which contains selected essays (mainly from foreign sources) on syphilis and small-pox. The observations on both those diseases are of such importance that the rendering of the original papers accessible by those who do not

read German or French will be welcomed. The essays dealing with syphilis include several by Dr. Fritz Schaudinn and Dr. Erich Hoffmann, on the occurrence of spirochætes in specific lesions, together with four communications by Professors El. Metchnikoff and Em. Roux, dealing with the experimental inoculation of various kinds of apes with the disease. An abstract of a paper by Dr. Theodore Shennan, which originally appeared in the *Lancet*, 1906, on the spironema pallidum in syphilis, and one by Castellani on the presence of spirochætes in yaws are also included. The contents of the volume cannot fail to be of great interest to those who practise ophthalmic medicine and surgery.

Eye-Strain and Eyesight. By JOHN GRIMSHAW, M.D., B.S. (Lond.), D.P.H. (Camb.). London: J. and A. Churchill, 7, Great Marlborough Street. 1907. 1s. nett; cloth bound, 2s.

This *brochure* of 77 pages (illustrated), according to its author, Dr. John Grimshaw, is "written for the general public, but especially for the parent, teacher, and publicist." It deals with eye-strain, its causes, consequences, and remedy, as well as with such subjects as the anatomy and physiology of the eye, the ways of testing children's eyesight, squint, the psychology of vision, and cognate questions. Dr. Grimshaw has a command of vigorous English, especially when dealing with quacks, the sight-testing optician, and so forth. Speaking of trachoma, he writes: "In Liverpool, there are seen a large number of cases of trachoma amongst the poorest and foreign element. Many of them have become stranded in England *en route* to America from Europe. America refuses them admission; England admitted them regardless of the infection and disease they convey to her subjects. It is time that this free importation of the degenerate and germ-laden foreigner should cease." Dr. Grimshaw, in our opinion, has fulfilled the task he has set before him in a creditable way. His book should be of service in educating the public to a better understanding of some of the more important points with respect to the sight of school children. We wish it a wide circulation.

NOTES AND ECHOES.

Spectacles and Coercion.

THE latest and least sapient suggestion of the Education Committee of the London County Council to induce parents to provide spectacles for their ametropic offspring, reads like an extract

from one of Gilbert and Sullivan's comic operas. It is municipal topsey-turveydom *in excelsis*. The proposal is to exclude children with defective eyesight, and then to prosecute the parents for failing to educate the youngsters. As an experiment (with the rates, of course) a group of some six cases to which this Gilbertian expedient has been applied will be taken before the Courts to test the legality of the position. There is a pleasing obliquity about the Council's plan that will appeal forcibly to the subtle mind, and will relegate the ancient legal fiction of Mr. Roe and Mr. Doe far into the background. The idea, of course, is based on the exclusion of verminous children from elementary schools, with subsequent prosecution of the parents, as actually carried out both in London and in Glasgow. But there the analogy between the two things ends, inasmuch as there is statutory power to exclude the dirty, while there is none to exclude children who see badly. It is sincerely to be hoped that this scheme will be replaced by something at once less tyrannous and more in accordance with the teachings of common sense. The truth is that the system at present adopted by the officials of the London County Council for dealing with ametropic children lies open to not a few abuses, and would be the better of a searching public investigation.

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British Medical Association (Section of Ophthalmology).

THE section of ophthalmology, under the popular and genial presidency of Mr. Louis H. Tosswill, was held last month at the West of England Eye Infirmary, Exeter, which has the distinction of being one of the oldest eye hospitals in England. The meetings were well attended, and the discussions lively. Amongst the foreigners present were Professor Landolt (Paris), Dr. Fish (Chicago), and Dr. Reber (Philadelphia). As showing the high esteem that ophthalmic surgeons enjoy among their professional brethren in this country, it was significant that the meeting at one moment included Richard Andrews Reeve (Toronto), past president, and Simeon Snell (Sheffield), president-elect of the British Medical Association.

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ONE of the most interesting communications was that of Mr. A. F. MacCallan, who gave his experiences of four years' work with the travelling ophthalmic hospitals in Egypt, the institution of which was rendered possible by the munificence of Sir E. Cassel. Lieut.-Col. Herbert's paper on "Spring Catarrh" gave rise to a good discussion, in which the general feeling

seemed to be that the disease was rare in England. Mr. Thompson Henderson's ingenious views with regard to the pathogenesis of primary glaucoma brought out, as might be expected, much difference of opinion among the members who joined in the discussion. Dr. Hinshelwood's paper on four cases of congenital word-blindness in members of the same family was well received and the occasion of a good discussion. Dr. de Silva gave a good account and showed many photographs and coloured pictures of lepra ophthalmica in Ceylon. An important communication was that of Mr. Simeon Snell, dealing with the causes of cecity in 333 inmates of the Sheffield School for the Blind. He brought to light the somewhat startling fact that of the entire number no fewer than 136, or 42·36 per cent., had been blinded by ophthalmia neonatorum. This deplorable figure gave the section an opportunity of unanimously passing the following resolution, proposed by Mr. Sydney Stephenson and seconded by Dr. Karl Grossmann: "In the opinion of the section of ophthalmology, the time has come for the British Medical Association to take action towards the prevention of ophthalmia neonatorum." It is interesting to note that an almost similar resolution was adopted in the section of Diseases of Children, under the presidency of Mr. Alfred H. Tubby, M.S.

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Trachoma in England.

MEANWHILE, the public is manifesting some alarm about the importation of that scourge, trachoma, into England. More or less sensational and inaccurate paragraphs continue to appear in the lay papers, and a recent issue of the *British Medical Journal* (August 3, 1907, p. 291) has adopted a somewhat alarmist attitude on the subject, stating that cases are becoming common in the Metropolis, "as everyone must know who is connected with any of our large ophthalmic hospitals." The cases occur mainly among a very undesirable class of alien immigrant, of whom the greater number come from Russia. The stringent enforcement of the American law, however, leads to their being dumped in England, which is thus "practically acting as a filter bed for the trachoma of Europe." Lack of means implies as its necessary consequence a stay in this country, and so, according to the *Journal*, "our alien population grows and spreads disease among those with whom they associate." All this may be true, but it is high time that we were furnished with exact figures from ophthalmic hospitals or elsewhere dealing with the prevalence of trachoma among the alien population and their associates. Armed with such figures, even the present Government might think it

worth while to enforce the Aliens Act passed by the late Unionist administration, at all events in so far as regards a disease like trachoma. Our poor-law schools furnish us with an object lesson of what indifference in the management of that malady may mean. It would be well to take the lesson to heart before it is too late.

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The Clash of Ophthalmological Congresses.

DR. VILLARD, of Montpellier, in the columns of the *Annales d'oculistique* for July last, draws attention to the fact that there will be two ophthalmological congresses during the year 1909—one at Easter, the International, at Naples, and the other in August, the eye section of the International Congress of Medicine at Budapest. Dr. Villard fears that the proximity of the two meetings will be inimical to the success of both, and he suggests that those responsible for the organisation of the first-named might be induced to postpone its meeting until the following year.

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Appointments.

PROFESSOR SCHIRMER has succeeded Professor Laqueur at the Strassburg University Clinique. Dr. Assicot has been appointed to the Rennes Ophthalmological Clinique. Dr. W. Lohmann has been recognised as *privat-docent* of ophthalmology in Munich. Dr. A. Schenkel has been accorded the title of professor in the German University of Prague, and Dr. Josef Helbron in that of Berlin. Dr. Salzmann, *privat-docent*, has been nominated professor at Vienna.

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The Optical Society.

IT is announced that the first Thomas Young Oration of the Optical Society, London, will be delivered in October next by Dr. Tscherning, of Paris.

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Commissions, Oculists, and Opticians.

WE reproduce the following, taken from the columns of *The Optician and Photographic Trades Review*, of July 26th, 1907, without comment:—"May a physician advertise, may he have connection with any patent medicine firm, may he accept a commission from the druggist on his patients' purchases? No, unless he cares to take chances of being

ostracised. Yet," writes B. L. T., "the oculist, with impunity, accepts, in fact demands, a large part of the money paid to the dispensing optician by some one examined by the oculist and directed to go to such and such an optician. The paying and accepting of commissions in this case is flagrant. Think! The patient, in many instances of very moderate means, goes to an oculist to have his eyes examined; the oculist demands a fee, and then advises the patient to go to this or that optician (whoever may have promised the greatest commission), who in order to concede to the oculist's demands is forced to charge an exorbitant price for his wares; thus the patient is not only overcharged, but deceived."

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Deaths.

WE learn with regret of the death of the Rev. Sydney R. Hodge, who was attached to the Wesleyan Mission at Hankow, China, at the age of 48 years. Mr. Hodge, who had subscribed to THE OPHTHALMOSCOPE from the beginning, took the keenest possible interest in everything that appertained to eye work. He was a member of the Ophthalmological Society. Dr. S. Czapski, the inventor of the Zeiss corneal microscope, has died at the age of 46 years. He succeeded Professor Abbé in the management of that scientific and philanthropic firm, Carl Zeiss, Limited, of Jena. Among other deaths we have to chronicle that of R. H. Werby, Surgeon to the New York Eye and Ear Infirmary, of Dr. G. T. Arney, of Altoona, Pa., and of Dr. C. Laight, formerly connected with the New York Eye and Ear Infirmary. Lastly, we have to announce with regret that will be shared by ophthalmologists all the world over, the death, at the age of 76 years, of Professor Edmund Hansen-Grut, for eight years professor of ophthalmology in the University of Copenhagen. Hansen-Grut, as doubtless readers will recollect, delivered the Bowman Lecture before the Ophthalmological Society of the United Kingdom in the year 1889, taking as his subject the pathogeny of concomitant squint. Among his other distinctions, and they were numerous, the Professor was an honorary member of the Ophthalmological Society.

* * * *

A School for Children with Defective Eyesight.

"HISTORY repeats itself" is a proverbial saying whose truth is equalled only by its triteness! We gather from a recent number of our readable contemporary, the *Ophthalmic Record* (Chicago), that a school intended for those having defective sight, hearing, or speech, has been established at 403.

Newberry Boulevard, Milwaukee, by two ladies Miss Fellows and Miss Starkweather, of Milwaukee. The work is non-sectarian. Provision is made both for paying and for non-paying patients. The underlying idea is to get such cases in early life, so that they may be more easily taught to become self-supporting members of the community. Part of the plan is to place the children, when sufficiently prepared, in the elementary schools alongside normal children. Such a school is needed not only in America, but elsewhere. We seem to remember that many years ago Mr. R. W. Doyne, reader in ophthalmology in the University of Oxford, proposed to establish a school on somewhat similar lines in this country.

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Belgian Ophthalmological Society.

In order to celebrate its tenth anniversary, the Belgian Ophthalmological Society has elected as honorary members, the following distinguished ophthalmic surgeons:—De Lapersonne (Paris), Fuchs (Vienna), Hirschberg (Berlin), Leber (Heidelberg), and Snellen, senior (Utrecht). The Duke Karl Theodore of Bavaria (father of the Princess Albert, the future Queen of Belgium) was also elected an honorary member of the Society.

* * * *

The Ophthalmoscope.

Mr. A. F. MacCallan, M.B., F.R.C.S., chief inspector of ophthalmic hospitals in Egypt (an article from whose pen appears in our present issue) has joined the staff of The Ophthalmoscope as correspondent for Egypt.

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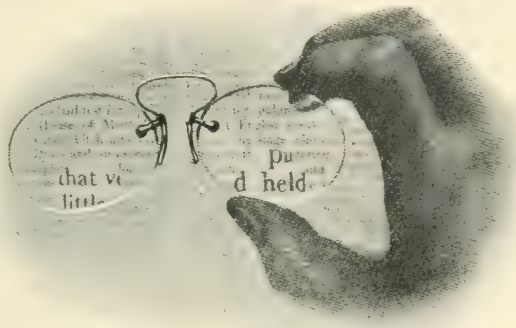

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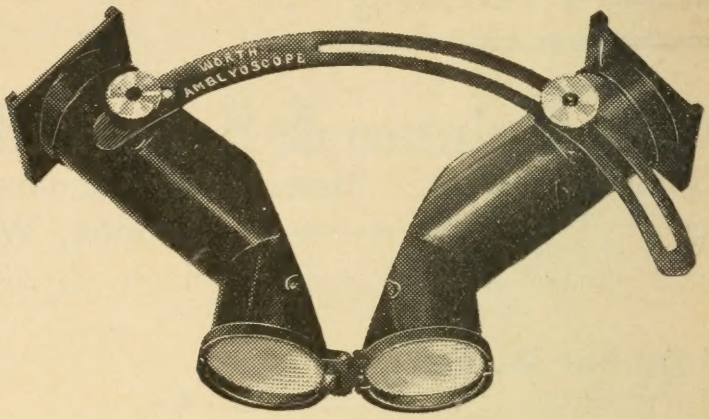

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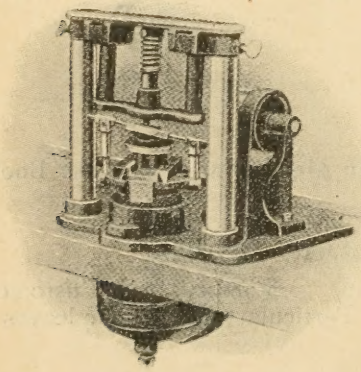

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